PARTIAL PROCEEDINGS

OF

Conference of Governors

COMMISSIONERS AND ADVISORS OF THE STATES OF

ARIZONA, CALIFORNIA, COLORADO, NEVADA,

NEW MEXICO, UTAH AND WYOMING

ON THE

COLORADO RIVER

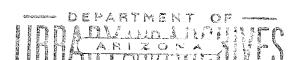
HELD AT DENVER. COLORADO.

Aug. 22. To Sept. 1. 1927



Part I,

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ON THE COLORADO RIVER
PHOENIX, SEPT. 24, 1927



CROARIEGS VI

Conference of Governors on the Colorado River Compact, Denver, ... Colo., Aug. 22-Oct. 4, 1927.

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COMMISSIONERS AND ADVISORS OF THE STATES OF ARIZONA,
CALIFORNIA, COLORADO, NEVADA, NEW MEXICO, UTAH
AND WYOMING, ON THE COLORADO RIVER

Part II

GOVERNOR HUNT'S SPEECH

SPEECH OF SENATOR MULFORD WINSOR SECRETARY ARIZONA COMMISSION

SPEECH OF HON. H. S. M'CLUSKEY MEMBER ARIZONA COMMISSION

SPEECH OF HON. THOMAS MADDOCK MEMBER ARIZONA COMMISSION

SPEECH OF SEN. A. H. FAVOUR MEMBER ARIZONA COMMISSION

SPEECH IN REBUTTAL BY SEN. MULFORD WINSOR

SPEECH IN REBUTTAL BY HON. THOMAS MADDOCK

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GOVERNOR HUNT'S SPEECH AT THE SEVEN STATES CONFERENCE IN DENVER

Water is the life blood of the western states, and without it, they die.

Even human life itself is no more jealously guarded by our laws in the semi-arid states of the west than is the use of water.

The Swing-Johnson Boulder Canyon Dam act which is being sponsored in congress by the state of California, contains the menacing provision that the secretary of the interior shall control the water of the Colorado river, apportion it and regulate its use.

The policy of the present secretary of the interior and the secretary of commerce, if enforced, will sever the jugular vein of Arizona and condemn her lands to remain a desert for eternity.

Arizona is vitally interested in the Colorado river because:

First: Arizona constitutes 43 per cent of the drainage area of the Colorado river, which is 97 per cent of our total area, and contributes more water to the Colorado River system than any other state with the exception of Colorado.

Second: Arizona has over 3,000,000 acres of land that need irrigation and that are possible of irrigation from the Colorado river, although some of it is not feasible of irrigation at the present time. But it is pertinent to comment that the other states in the basin are asking through the Santa Fe compact for water which they admit they cannot use for one hundred and fifty years at least.

Third: There is more land in the Colorado River basin in Arizona and California needing irrigation than there is water to irrigate it. There is a standing menace to both states in Mexico where over a million acres of land can be irrigated by gravity, by merely cutting a hole in the levee and running the water into a canal and out onto the land.

Fourth: Arizona has within her borders, on the Colorado river, damsites capable of producing over 4,000,000 horsepower of hydroelectric energy, every horsepower of which is equivalent to the consumption of 10 tons of coal or 30 barrels of oil annually. That is wealth that rightly belongs to the state, and we need revenue from it. But under the Swing-Johnson bill this power would be exempt from taxation.

Fifth: There are three major sites for the storage of water on the Colorado river. The Glenn Canyon site is wholly within the state of Arizona, although the greater part of the reservoir will be in Utah. Boulder Canyon site is between Arizona and Nevada.

Sixth: Arizona needs and can use all the water that it is possible for her to obtain from the Colorado river.

Seventh: Arizona has been and is willing to concede to all of the states in the basin the right to use all the water that falls upon their water sheds which they can put to beneficial use. She has endeavored to make an agreement with California and Nevada which will give to Nevada all the water she can use and make a fair division of the remainder between California and Arizona.

Eighth: California, although she contributes no water to the Colorado River system, is entitled to a fair share of the benefits to be derived from the harnessing of this stream; but California is demanding water for every acre of land that it is feasible to irrigate, including water that she proposes to pump 1600 feet over a mountain range by the use of power generated in Arizona and Nevada.

Ninth: Los Angeles is asking for more water from the Colorado river than is required for a population equivalent to that of the combined cities of New York, Chicago, Philadelphia, Detroit, Cleveland, St. Louis, Baltimore and Boston. I have often marveled at California's booster spirit, but I pause to comment that that will be some increase in population.

Tenth: Arizona has within her borders the most successful project built by the United States Reclamation service—the Salt River or Roosevelt project, and it is managed by local farmers. The policies adopted in harnessing the Salt river should govern in controlling the Colorado river. The major control dam should be built in the upper reaches of the stream so that a uniform flow of water would be available for the various power dams below before it is finally used for irrigation.

Eleventh: Arizona expects to derive a revenue from hydroelectric power developed within or partly within this state equivalent to the tax rate borne by other classes of property of similar value within the state, no matter what agency may be chosen to develop the river.

Arizona has the following proposal to offer for your consideration as the basis for the preparing of a compact between Arizona, California, and Nevada which will be supplementary and subsidiary to the Colorado river compact adopted at Santa Fe:

(1) Arizona will accept the Santa Fe compact, if and when

supplemented by a subsidiary compact, which will make definite and certain the protection of Arizona's interests.

- (2) That before regulation of the Colorado river is undertaken, Mexico be formally notified that the United States government reserves for use in the United States all water made available by storage in the United States.
- (3) That any compact dividing the water of the Colorado river and its tributaries shall not impair the rights of the states, under the respective water laws, to control the appropriation of water within their boundaries.
- (4) That the waters of the streams tributary to the Colorado river below Lees Ferry and which are inadequate to develop the irrigable lands of their own valleys be reserved to the states in which they are located.
- (5) That so much of the water of the Colorado river as is physically available to the lower basin states—but without prejudice to the rights of the upper basin states—shall be legally available to, and divided between Arizona, California and Nevada as follows:
 - (a) To Nevada, 300,000 acre feet per annum.
 - (b) The remainder, after such deductions as may be made to care for Mexican lands allotted by treaty, shall be equally divided between Arizona and California.
- (6) That the right of the states to secure revenue from and to control the development of hydro-electric power, within or upon their boundaries, be recognized.
- (7) That encouragement will be given, subject to the above conditions, to either public or private development of the Colorado river, at any site or sites harmonizing with a comprehensive plan for the maximum development of the river's irrigational and power resources.
- (8) That Arizona is prepared to enter in a compact at this time to settle all the questions enumerated herein, or Arizona will agree to forego a settlement of items 6 and 7, and make a compact dividing the water alone, provided it is specified in such compact that no power plants shall be installed in the lower basin portion of the main Colorado river until the power question is settled by a power compact among the states.

ADDRESS OF SENATOR MULFORD WINSOR

Secretary Colorado River Commission of Arizona, at Seven States Conference, Denver, August 22, 1927

GOVERNOR DERN, GOVERNORS AND REPRESENTATIVES OF THE STATES OF THE COLOADO RIVER BASIN:

Perhaps it strikes you gentlemen, citizens of comparatively old and certainly well-regulated commonwealths—and I am not unprepared to concede the justice of your impression—that it is a presumption upon the part of Arizona, the forty-eighth state, the Baby State, the last state to be admitted to the Union's fold, to advance an opinion, and still worse to take that opinion seriously, with respect to a question, such as that of the Colorado river, of so great importance to other states much older in years, more experienced in statecraft, riper in judgment, more mature in wisdom, and possessed of population and wealth far exceeding our own.

I am led to hope, however, that in the words of Barney Google's double, Eric Van Horn, you will not feel hurt. I am led to hope that taking into account that very youthfulness, inexperience and disparity in wisdom and judgment which we so freely confess, and taking into consideration also our pardonable ambition to grow and expand and develop in a material way, as the beneficent Creator who so bountifully endowed us with natural resources evidently intended that we should, you will bear with us, if not altogether patiently, at least tolerantly, as becomes your superior age and dignity, while we lay before you our views. Certainly I trust that you will not, without the most careful deliberation, join with our smoke-breathing friend, Toe Crail—or is it Cruel?—who represents in Congress a California volcano. They districted California, I think by volcanoes, and this particular one is not extinct. I trust that you will not join with Mr. Crail in throwing us out of the Union, as it were, on our noses, as he has threatened to do. That might not be so bad, to be sure, if a way might be found to annex us to Mexico, for then, under the comity of nations' clause of the Colorado River compact, and the kindly treatment which our great republic always accords to weaker nations, we might with considerable confidence look forward to a consideration for our needs and desires, if not our rights, such as we have scarcely been led, by the attitude of some of our neighbors, to anticipate. But we are willing to take our chances under the Stars and Stripes, if our California friend will permit, satisfied that in the long run justice will prevail, and that the blessings and benefits which ride the waves of the Colorado and are waiting to be stored in its reservoirs, will be bestowed alike upon the weak state and the strong. I have the

faith of an American citizen.

And by all means I trust that you will not feel as unkindly disposed toward us as one of our distinguished ex-Presidents once felt. He not only would have thrown us out of the circle of states, before we had opportunity to get our chair warm, but strongly intimated that he would be glad to see us all hung. You may recall that Arizona's progressive constitution, which was formulated prior to our admission, created something of a furore in conservative It embraced many provisions at which safer, saner and more staid commonwealths looked askance and which the country's best minds contemplated with something akin to horror, although these so-called radical provisions have now become commonplace. To Mr. Taft, who then occupied the White House, our proposed constitution was anathema, and many were the warnings we received, while the document was being drafted, that it would be rejected in Washington. A peculiar provision of the Arizona Enabling Act was that our constitution must receive the approval, not only of congress, but of the president as well. Nevertheless, the document was drafted and submitted to the people of Arizona. Many propagandists came into the Territory to advise the electorate to reject it. Regardless of that, it was accepted. Congress, after a stormy debate, decided that it was our business, and voted approval. The president was the last line of conservative defense, and he felt his responsibility keenly. Many times he had asserted that he would not swallow the bitter pill, and his spokesmen had heralded the tidings far and near. His position was a difficult one. In spite of all this he was finally constrained, upon one condition, to yield. If Arizona would remove from its objectionable constitution its most offensive feature, to-wit, the recall of the judiciary, he would give the cursed document his formal approval, albeit without enthusiasm, and reluctantly. The terms were accepted. Arizona wanted statehood. Another election was called, and the recall of the judiciary was duly and solemnly eliminated. The president doubtless congratulated himself that a vital principle had been preserved and the independence of the judiciary had been sustained, even though it were by the skin of its teeth. The constitution of the new state was approved; Arizona came into the Union to the beating of drums and the clanging of cymbals, and Governor Hunt walked to the state house for the only time in his life, though he has been riding to it quite regularly ever since. But hardly had the ink dried on President Taft's approval of the constitution—scarcely did he have time to lean back in his easy chair and seek relief from the work and worry of saving the judiciary, when Arizona up and had another election and put the recall of the judiciary right smack

back in the hole it came out of. Was President Taft angry? Events will show. About that time the abolition of capital punishment was being agitated in Arizona, and the warden of our state prison was taking an active interest in it. He wrote to distinguished individuals and societies, throughout the United States and elsewhere, asking for an expression of their views. From the president promptly came this significant and pregnant reply:

"Mr. R. B. Sims, Florence, Arizona. Dear Sir: I do not believe in the abolition of capital punishment for the people of Arizona. Yours truly, WM. H. TAFT."

Now we earnestly trust that you gentlemen do not and will not feel that way. We trust that you have no disposition either to expel us from the Union or hang us. Perhaps we are trying on the nerves, but we are doing the best we know how, and our own nerves have been pretty severely tried too.

Whatever our rights may be—and there will be time enough to discuss them later—our interest in the Colorado river is very large. Important as the Colorado is to all of the states which contribute to its drainage area, the realization of its benefits is perhaps more vital to Arizona's future than to any other. It is perhaps the most important of our natural resources. Our copper mines are conceded to be the greatest in the United States, and our gold, silver, lead, zinc and other mineral resources are very important; but the mines will not last forever. In the very nature of things they must deteriorate. We have immense areas of land susceptible of reclamation, but without the life-giving water of the Colorado river can be applied to it much of it will lie fruitless still other thousands of years, under a torrid sun. Without cheap power for the pumping of water many of our interior valleys will forever be desert. We have immense areas of well-wooded and well-watered mountains, but practically all of this area has been dedicated to the cause of federal conservation or to the nation's wards. More than half of the state's total area, and practically all of the naturally watered area, is embraced within national forests, national monuments, national parks, and Indian reservations, or is just naturally reserved for the reason that some day it may possibly be good for something. Of course, certain advantages accrue from the lands embraced within the national forests, as a percentage of the revenue therefrom is returned to the state for the schools and roads, but this return is woefully meagre. Our taxable resources are greatly curtailed, and the expense of government must be borne by too few. Arizona's hope of development and expansion lies in agriculture in agriculture and the growing of citrus and other semi-tropical fruits. This sort of expansion depends upon reclamation. Reclamation, in

Arizona, depends upon the utilization of the waters of the Colorado and in the development of power for the pumping of water in our interior valleys. Furthermore, more than 3,000 feet of fall marks the course of the Colorado through Arizona, capable of producing, when the river is properly harnessed, in the neighborhood of 6,000,000 horse-power. That is a tremendous resource, and I cannot conceive that the most ardent nationalist—even Alexander Hamilton if he were here today—would deny us the benefits of that resource, any more than he would deny similar benefits to any other state through which the river flows. Can there be any wonder that Arizona feels a mighty urge for fair treatment in the matter of a distribution of the benefits to come from this great river's development. It is not too much to say that with us it is a matter of life and death.

This is the selfish view of the matter, and I am sure no one will hold that Arizona is barred from considering the question selfishly. That is a human trait upon which no state—not even our sister state of California—has been granted an absolute monopoly, or at any rate the monopoly has not been confirmed.

But our interest in the Colorado is by no means altogether a selfish one. We fully realize what the development of this great river's resources means to all of the states of the basin, to the entire southwest, and in a way to the entire country. In a particular sense, though not in the sense in which our friends who lean to the policy of nationalization would consider it, we appreciate that the Colorado river is a national asset. The creation of wealth and the stimulation of business and industry in one section of the country sends out its electric current into the surrounding sections, and to some extent to all parts of the nation. So we want to see the Colorado developed, as rapidly as economic conditions will warrant. We want to see the floods curbed, and the waters prevented not only from doing damage but also from going to waste. We want to see the nation's diminishing stores of oil and coal, which are being used in the creation of power, conserved, as they will be by the creation of great stores of hydro-electric energy. We want to see these things done for the benefit of all. We want to see them done, also, on a basis of reasonable equity and justice to the interests most directly and most vitally concerned—the states of the Colorado River basin. And we want to see them accomplished without the interminable delays which inevitably are caused by litigation.

This is the reason why, when far-sighted statesmen of the upper reaches of the Colorado, whose rains and snows contribute so largely to the river's flow—I refer to the rains and snows of the upper reaches, not of the statesmen—proposed that your admittedly

and professedly slow agricultural development be safeguarded by a compact precedent to large development in the lower basin, we looked with sympathy upon the idea. We looked with sympathy upon it because we believed in fair play to all of the states and because we believed that by that route, and only by that route, could large development be brought about. So we believed in an agreement—some such an agreement as was formulated at Santa Fe through the splendid initiative and management of the representatives of the northern states.

Unfortunately, it fell out that the people of Arizona, who at first were strongly disposed to ratify that agreement, were deterred from doing so by the raising of serious doubts that our state's vital interests and rights, in certain essential particulars, were safeguarded, and by certain untoward incidents of which I shall speak. The rights and interests of the upper states, at whose instance the compact was formulated, were safeguarded, and we congratulate and compliment you upon it, but our people came to the conclusion that ours were not, and they have not changed their minds. I want to say that this failure to fairly surround Arizona with protection was not due to lack of capable representation. Despite the lamentable blunder that he was not of my political faith, it is my conviction and I think the conviction of all who have examined the record, that Arizona was ably and conscientiously represented at Santa Fe by Mr. Norviel, and if he had received the support, at the hands of the representatives of the other lower basin states that he was entitled to, Arizona would have had less occasion for alarm and the compact would doubtless have been ratified.

It may be of interest to you to know that I approach the matter of Arizona's failure to ratify the compact as one who was an original and active advocate of ratification. I say it without blushing and without shame, and I shall be glad, at any proper time and place, to defend, or to endeavor satisfactorily to explain, the position I then took and every utterance I then made. I am of the opinion now that had Arizona ratified the compact in the beginning of this controversy, and before certain events occurred which placed her rights and interests in jeopardy, the danger of injustice to her would not have been nearly so great as it would be were she now, without a supplemental treaty or undertaking, to ratify that agreement. But likewise without blushing and without shame—although I often blush when I am 'not ashamed-I now say, unhesitatingly, that events have shown that Arizona's legitimate interests and indubitable rights would have been gravely endangered had her unconditional ratification, without interpretations or supplemental agreement, been given, and I am glad, and I believe that you men of the northern

states have reason to be glad, that Arizona did not run that risk.

What, then, are the reasons which impel me to be pleased that Arizona did not ratify the compact? In stating them, I am certain that I express the Arizona view.

The first reason is that a serious difference of opinion, among eminent legal authorities, has arisen as to the exact meaning and scope of the vital provisions of the compact which relate to the allocation of water. The compact allocates to the upper basin seven and a half million acre feet of water per annum, and to the lower basin a like amount, with a provision that the lower basin may apply another million acre feet per annum to beneficial consumptive use. With the allocation in perpetuity to the upper basin states, and the guarantee thus given that the future agricultural development of the upper states shall never be circumscribed, we have no quarrel. We may envy you, but we do not complain. From the first we have been in entire sympathy with that proposition. From the first, however, it has been well understood by men who are posted, that the allocation to the lower basin would be insufficient to satisfy the legitimate requirements of the lower basin states for the present and future development of their agricultural lands. Advocates of the compact in Arizona, of whom I was one, took the position and honestly believed that for the satisfaction of those requirements, over and above the allocation made, we could draw by appropriation upon the unallocated flow of the river, probably amounting to some four or five million acre feet per annum, and, subject to the superior right of the upper states, upon the waters allocated to them but which they may not for many years to come make use of, and which under the operation of the law of gravity would naturally find their way to the lower basin. That is what those of us who favored ratification honestly believed, and upon that belief, plus our great desire for the river's early development, we predicated our stand. However, a subsequent study of the provisions of the compact by eminent legal authorities led, if not to a positive conclusion, to the strongest sort of a fear, that the lower states, under the terms of that instrument, would be debarred from the appropriation of or the acquisition of any right to any of the waters of the river system, except the water specifically allocated by the compact. Since much more than the full amount of this entire allotment to the lower basin has been filed upon, and the works have been completed or are in course of construction for an amount of water equal to or actually greater than the entire allocation, it follows that if our appropriations were restricted to the present allocation there could be no further development in the lower basin in the United States.

And that brings me to the second reason why Arizona failed to ratify the compact. I say there could be no further development in the United States. But there could and would be further development elsewhere. Not the least startling feature of the situation, if the legal interpretation of the compact to which I have referred is correct, and in conversation with them I find that some of your highest water authorities in the north agree with it, is that the very law which would deprive the lower states of the right to appropriate the water flowing by their doors, would in effect allocate these waters to Mexico. Mexico is today applying Colorado river water to 230,000 acres of land; some 300,000 acres have at times received water from the river; the acreage is being steadily added to; there are in the neighborhood of a million acres of land in Mexico susceptible of reclamation from the Colorado river. Practically all of this land is owned by Californians-800,000 acres by a single Los Angeles interest. In the absence of a provision or an agreement whereby the water physically available in the United States may be appropriated and used in the United States, and of effective notice to Mexico that she can acquire no right to water stored in the United States, it may well be feared that there is a practical allocation to the California-owned Mexican lands, which are so situated that they can use the water quickly of some four to five million acre feet. It is not thinkable that any representative of any state of the Colorado River basin wishes that to occur.

To climax these two alarming circumstances—the interpretation of the compact by eminent legal authorities that the unallotted flow of the river, necessary for the uses of the lower states, may not be appropriated, and that this amounts, in effect, to an allocation of that unallotted flow to Mexico—those of us who favored unconditional ratification were confronted by another, to us, astounding situation.

As is well undersood, the Colorado River compact deals only with the allocation of water. It has nothing to do with plans of development, of which there are many in the lower basin. It has nothing to do with the agency by which development shall occur. It has nothing to do with power, where or by whom it shall be created, or with the division of benefits to accrue therefrom. It specifically provides that it shall not be construed to interfere with the rights of the states to control the appropriation, use and distribution of waters within their borders—a sovereign right which I am certain no state is willing to or can afford to surrender.

It was the general understanding; it was the demand of the upper states; it was the declaration of the federal power commission and of official Washington generally, that as a condition prece-

dent to any sort of development on the river there should be an agreement upon the matters embraced in the compact, and specifically upon the allocation of water. Upon that theory—the theory that before any development could occur the compact must be ratified—the proponents of the compact in Arizona proceeded, willing to leave the other important questions to be settled after the question of water was settled, confident that they could be determined fairly and justly, and confident that none of their rights to insist upon their fair adjustment would or could be taken from them by the compact. Many attempts were made to inject into the discussion of the compact the discussion of plans of development and dis-These attempts were rejected by the cussion of damsites. proponents of the compact, who believed in good faith that they had no place in the discussion. The charge was made that the compact was merely part of a scheme to advance a certain project in which California was beginning to show some interest, and by the proponents of the compact in Arizona indignantly denied, in equal good faith. What was our chagrin, therefore, when all too soon it became evident that our friends over in California were determined, without regard for the completion of an agreement to which Arizona would be a party, to press for legislation by congress giving effect to a certain plan of river development, partly within Arizona, without Arizona's consent or approval, which would seriously affect Arizona's interest in the waters available for use in the lower basin if indeed it did not entirely eliminate 'Arizona's interest in those waters, and would predetermine all of those matters with which the compact does not deal, and which were left, to be dealt with in orderly manner, after the effecting of an agreement respecting the allocation of water. This determined, insistent attitude upon the part of California negatived the very theory upon which the compact was predicated, negatived the basis of the support which had been given it in Arizona, and gave color to the charge that the compact was part of a scheme for a development which would give all of the water of the lower basin to California and Mexico. To heighten this color, the California legislature withdrew the ratification which it had given to the compact and replaced it with a ratification contingent upon the authorization by congress of that certain particular plan of development, which as I have said, would exhaust the waters allocated to the lower basin, thus leaving Arizona out of the picture, and would predetermine, without regard for the views, interests or rights of Arizona, all of those matters which were to be left for subsequent consideration and adjustment.

Is it to be wondered at that Arizona failed to ratify the compact,

or that those who had honestly and with the broadest public spirit advised and favored ratification, as a means toward the river's development, were forced to the conclusion that unconditional ratification, without modifications or a supplemental agreement, would be a dangerous and perhaps a fatal policy?

Since that time there have been many attempts to secure a supplemental agreement with California, which would determine not only the allocation of water available to the lower basin states, but all of the questions affecting Arizona raised by the proposed legislation. It is not for me to say whose fault it is that no agreement has been reached. It may be California's or it may be Arizona's. It may be both. But I am constrained to suggest that such an agreement has not been made easier, so far as our neighbor is concerned, by the pendency in congress of the Swing-Johnson bill, which would give them everything they want, and the apparent likelihood of its passage.

I am not here to criticize California for getting what she can. I dare say that is all right—certainly it is from the California point of view. All the world is familiar with the California psychology. California is the greatest state in the Union; there is no other like it. Her cities eclipse those of all the world. Her climate is perfect. Her institutions have no equal. That these things are true I have been many times convinced by California orators, and every Californian is an orator when it comes to extolling the splendors of California. When California needs something, or thinks she needs something, there are no conflicting rights, there can be no conflicting rights which should interfere with the getting of it. Nothing must stand in the way. Hence her determination, regardless of the compact, regardless of any agreement or understanding, regardless of the views and rights of the states in which the proposed development was to be located, to bring about, right now, a certain development designed for California's benefit. I do not blame our California friends, but I do question their judgment, which made it impossible for the compact to be ratified by Arizona. And if California deplores the fact that the compact has not been ratified, and the development of the Colorado has not been begun, California has no one to lay it at the door of save California.

And on Arizona's behalf I want to inquire if our state is to be criticized for her efforts to protect herself against the destruction of her opportunities for agricultural growth, and against the desruction of her rights as a sovereign state? We admire the vigorous and able and altogether commendable efforts in that direction put forth in their own behalf by the states of the upper basin. Is the same thing reprehensible in us? With all of the admiration in

the world for California, and a sincere desire to see her cities expand like a cake of rising yeast and blossom like a mushroom, I still must inquire upon what theory of generally recognized justice the California go-getters should be permitted to come over into Arizona and take our water, when they have several times as much in their own streams, none of which we are asking for, or why they should come to our state, without so much as by-your-leave, and take the power which may be generated by the fall of the river within our borders, when they have three or four times as much hydro-electric power, actual and potential, in their own streams? Why, in short, should there be applied to Arizona the short end of the biblical proverb to the effect that to him who hath more shall be given, and to him that hath not even that which he hath shall be taken away? Why should we be the victim of the more modern interpretation of the same principle, that what is California's is California's, and what is Arizona's is California's? We may be young and we may be weak, but we are a sovereign state, and I submit that the folds of the American flag should be large enough to shelter Arizona no less than her larger, more powerful neighbor.

And speaking more broadly—not to California alone, but to all of you—I want to inquire if you honestly believe this so-called sixstate compact is a nice thing, a fair thing, a big thing, or a noble thing? I have mentioned the consideration for Mexico which is manifested in the compact. Why all the solicitude for a weaker nation and so little solicitude for the welfare of one of our own weak states? I shall not speak of the flimsiness of the protection which the six-state compact would afford to the upper basin states. I know you have lawyers who are too good to be satisfied with that. I speak of it only from the standpoint of justice. If in writing a contract in which seven parties are interested, it is not to be contingent upon acceptance by all, why subject it to ratification at all? If it is to be forced upon a party willy-nilly, why not say so in the beginning? Why say that it is to be effective when approved by all, when the meaning is that it shall be effective in any event? If six parties can enter into a contract binding the seventh, or rendering the seventh helpless, why not five, or four, or three? And in the final analysis, where is our boasted principle of self determination?

I submit that if coercion is justifiable; if it can be defended by any process of reasoning, there can be in the present instance only one proper form of coercion, and that is the coercion which is contained in the policy that there shall be no development—that there shall be no assistance at the hands of the federal government, and no acquiescence by the states of the basin, until there is an agreement in which all shall participate. Then, when the importance of development equals the price being paid, there will be agreement.

Briefly, and merely for the purpose of emphasis, I wish to refer to one other thing. It relates to a subject which has been most ably presented by Governor Dern. I refer to the violence which the legislation to which I have referred, and the course of our California friends to which I have referred, does to the sovereign rights of the states of the American Union. Is the principle to be established that the states have no control over the waters within their borders? Is the birthright of these arid western states, or of any state in the Union, to be sacrificed to the grandeur and glory of a single state? Or are we going to stand steadfast and upright upon the fundamental principle that the constitution of the United States is a constitution of delegated powers; that the powers not delegated to the United States are reserved to the states, and that in the exercise of those powers every state, to the extent that their own constitutions do not forbid, is the equal of every other state? That is the sheet-anchor of our sovereignty as states of the American Union, and it must not be lowered in any breeze,

Arizona earnestly and honestly desires an agreement whereby the Colorado may be developed, its floods controlled, power created as needed, and the legitimate interest of all of the states, with especial regard for irrigational requirements, adequately safeguarded. Arizona has not ratified the Colorado River compact, for the reasons I have given. As it stands, she is at the mercy of California and Mexico. The water available to the lower basin will speedily be gobbled up by California and Mexico, and Arizona's slow-developing lands will go dry. But if this situation can be corrected, and fair opportunity provided for Arizona's agricultural growth, through the adoption of the safeguards included within the proposal we have submitted for the consideration of this conference, Arizona will not be slow in joining the chorus. Agreement to these equitable and just provisions, and the unconditional ratification of the compact by the other six states, will insure Arizona's unconditional ratification of that treaty. The allocation of water thus agreed upon, we will take our chances on the other matters which will remain to be agreed upon, and which we consider extraneous to and independent of the treaty allocating the water, such as the location of dams, plans of development, by what agencies development shall be undertaken, the question of distribution of benefits from power, and other questions which will naturally arise in reguular and orderly sequence.

I ask you, in all seriousness, can anything be fairer than that?

ADDRESS OF H. S. McCLUSKEY,

Member Colorado River Commission of Arizona, at Seven States' Conference in Denver, August 22, 1927

I was particularly impressed this morning with the speech of the governor of Utah. The statements contained therein, I think, present in the abstract Arizona's case, the things for which we have been contending and the reasons for our refusal to ratify the Colorado River compact, and the basis for the proposals we have put forward to try and secure a compact that will be supplemental to the Santa Fe compact, so that our rights might be protected. Arizona has been held up to the scorn of the people of the other states in the basin, and to the people of the United States; we have been called "dogs in the manger" and a lot of other hard terms; we have tried to bear the criticisms and take them philosophically and by continually endeavoring to present our case, convince the people of the upper states and the people of the United States that the epithets hurled at us were unmerited, and the principles for which we were striving were for the best interests not only of Arizona, but for the best interests of the other states in the Colorado River basin, and for the United States.

Recently a very distinguished member of the cabinet had occasion to refer to Arizona as a rebellious state, because of its failure to ratify the Colorado River compact. We must take issue with that statement. We are not rebellious. We have tried merely to tell the upper basin states and the United States that as long as the Colorado River compact stands as it is, unsupplemented and uninterpreted, Arizona cannot ratify it, because it means her doom.

Numerous statements have been made in the press and by the representatives of the other states as to what they contribute to

the Colorado River system and to the Colorado River basin.

Arizona has felt that she has a stake in the Colorado river. She feels that she has a tremendous stake in it, larger than any other state. I invite your attention to the map over on the right. You will find only a portion, a small portion, of Wyoming, is in the Colorado River system. A portion of the state of Colorado, colored brown, is in the Colorado River system; the light brown is Utah and constitutes only a portion of that state. The red constitutes the only portion of the state of New Mexico that is in the Colorado River system, and over on the left, the green represents a small portion of the state of Nevada. Then a little strip of yellow, or gold, as you may term the color, is California; and the blue block, 43 per cent of the entire area, 97 per cent of our entire state, is in the Colorado River system.

All the water we use for domestic uses, for irrigating uses, for mining, power, or any other purpose, must come from the Colorado River system. Consequently, we scrutinized the compact with a little more care possibly than some of the other states in order to see just exactly what it meant. We came to the conclusion—some of us early and some of us late—that Arizona was not protected by the Santa Fe compact. I was one of the first to object to the compact. I think I wrote the first editorial in our state against the Santa Fe compact.

The first sixty days after the compact was drawn, our people objected to the upper basin states diverting water and taking it to the Mississippi area. When we learned the amount of water that could be taken was limited by the physical characteristics of the country, and possibly all that could be taken would be for domestic uses in Colorado and some additional amount in Utah for irrigation, Arizona withdrew her objection to that portion of the compact, so far as the upper basin states were concerned, as to their use of the water. Arizona objected to certain other features relative to the upper basin, but we would have preferred, and prefer now, to say to the people of the upper states that we have no objection to you using all the water that you can put to economic and beneficial use, and after this water is used for a beneficial use, the rest of it must of necessity from natural causes, come to the lower basin for them to put to use. We think it is wrong to reserve it, as was done in the compact. You cannot use it and we cannot claim it, and Mexico will get it.

It has been stated by representatives of the upper basin states, that Arizona, while it contributes a great deal of area, contributes very little water. We employed a competent engineer to take the matter up with the United States Weather Bureau and secure the facts as to the precipitation in each of these states in the Colorado River drainage area. I invite your attention to that map; down in the left hand corner, white, is the rainfall from 0 to 5 inches; the light blue runs from 5 to 10 inches; the yellow runs 10 to 15 inches; the red, 15 to 20 inches; the blue around 20 to 25 inches, and in between you will find brown spots running as high as 30, 35 and 40 inches rainfall per year.

I invite your attention to the state of Arizona, and to the same colors in the upper basin, and if you will examine the map you will see that Arizona contributes more water to the system than was anticipated at Santa Fe.

The compact as drawn, limited the lower states to the use of only eight and one-half million acre feet of water. At the time, or shortly after the compact was submitted, a statement appeared

in a magazine called "Municipal Facts", published by the City and County of Denver, in which the statement was made that there were five million acre feet of water unallocated by the Santa Fe compact which might be allocated to Mexico by treaty, and if anything, was left over after the treaty was made it might be apportioned among the seven states in the Colorado River basin.

We have examined the records of congress, and we find from the testimony of representatives of the upper basin states, that they have laid claim to the use within each of their states of a total of about 7,400,000 acre feet of water. Many engineers have testified that they will use far less than that. We care little if you use far more, as we accept the principle that if you are going to use seven and a half million acre feet, and we recognize your right to use it, it means the right to divert all of the water in the river, and we will get the return flow. It would take all the people of Arizona to come up here and measure how much you are taking out and then they would not be able to check it. All that we are guaranteed under the treaty is 75,000,000 acre feet in a ten-year period, and that don't mean much. If a long dry cycle comes, and the wet season does not come around, as anticipated, and you cannot make delivery, you will say that it is too bad. We recognize the right, and say it is economically sound and proper, that the state where the rainfall occurs should have the right to use the water first. The return flow, and the natural regulation that will be provided by using the water in the upper reaches of the stream, will give a regular flow in the lower stream with less silt and will require less storage, and with probably far less evaporation.

So we have no quarrel so far as the upper basin states are concerned, to the use of all the water you can put to economic and beneficial use. However, when we recognize that principle and you have been allotted the seven and one-half million acre feet, there should be no disposition on the part of the upper basin states to withhold from the lower basin states the water that is physically available for their use, because if you cannot take it, and it goes down in the regular flow, and Mexico builds a canal, and puts it on her land, forty, fifty, or seventy-five years hence, when we get ready to use it, they will take us to the League of Nations, or the Hague, or some super-government, and that institution will tell us that the water has been put to use in Mexico under prior appropriations and we cannot have it.

We say we have the right in the lower basin to use all the water that will be available for use within our states. We say we cannot use all of it now. No state is justified in putting in irrigation projects now and extending their irrigated lands in this country,

because the lands now in cultivation are producing more than the people are able to consume. The farmers of this nation are in distress, and we do not need any additional competition for them now.

I want to say, however, that we believe in the destiny of this country; we believe it is going to grow; we believe that the population is going to increase; we believe that it is going to prosper; and all the lands in the southwest—where we have a climate unmatched in the world, and where people are going to want to live—will stand a burden of water duty far in excess of what we anticipate today, and there will not be enough water in the Colorado river to supply the needs of the states of the basin.

Over in Los Angeles, they say they want 1,500 second feet of water for domestic purposes. We do not like to question their statement, but we do not believe it. We believe that water could be obtained far more cheaply within the State of California than it could be had by coming to the Colorado river, pumping it 1,500 to 1,700 feet in the air, and carrying it over there. We believe what they want is to increase their irrigated area and conserve the irrigated area they now have.

We are not opposing this compact simply to be obstructionists; we do not consider ourselves obstructionists. The Santa Fe compact was submitted to the Arizona legislature in January, 1923. We had very few facts to go on. There was a commission in the field, an engineering commission, headed by an engineer from the United States Geological survey, one from the United States Reclamation service, and one from our State Water department. They were making a survey as to the possibility of irrigating land in Arizona from the Colorado river. That commission made its report in July and we published the report and put it in the hands of our people immediately. The report justified the assumption that the figures that the compact commissioners were using at the time the compact was drafted, that Arizona would only be able to irrigate 280,000 acres, were erroneous. It is our belief that when the commissioners met at Santa Fe they under-estimated the amount of water that Arizona was contributing to the Colorado River system, and also underestimated the amount of land in Arizona that was possible of irrigation from the Colorado river.

We believe from the best information available, that the lower basin has now projects that are already constructed, or financed and under construction which will utilize within the next five years, an amount of water which will exhaust the amount of water that has been appropriated to the lower basin states for their use. We believe that the lower basin states cannot legally take any additional water from the unappropriated amount, hence under the compact

we would be forestalled and estopped from any further development in the lower basin. We do not believe that is equitable; we do not believe it was the intention of the compact commissioners, nor do we believe it now, especially in view of the fact that if the lower basin legally cannot use the available water, water that is physically available, that Mexico will use it.

We have heard numerous protests from spokesmen for California of their objection to any additional land being irrigated in Mexico, but we also know that the land that will be irrigated in Mexico happens to be owned by Californians—powerful, influential Californians—and we have an idea that there are numerous people in California that would like to see the property values of the citizens

of California enhanced by the irrigation of land in Mexico.

We were advised by some of our congressional representatives that some of the official spokesmen for the state of California in their efforts to drive through congress the Swing-Johnson bill, did not hesitate to approach representatives in congress of the great state of Texas and suggest to Texas that that state might be able to obtain Mexican water for their use by treaty if Mexican lands were satisfied from the Colorado river by treaty. We know that no stone was left unturned by the state of California to drive through the Swing-Johnson bill, and some of those that opposed the Santa Fe compact have opposed it because the compact and the Swing-Johnson bill were linked together. From the inception of the Colorado River compact and the Boulder Canyon project California has endeavored to make the two synonymous.

We listened with interest and inspiration to the Governor of Utah this morning when he suggested for our consideration the necessity of maintaining inviolate the doctrine of the rights of the states to control the water in their streams. He also went further and urged that their lands be ceded to them by the federal government. We subscribe to that principle without reservation or qualification.

We deeply love the United States. When the term rebel was applied to us, we were reminded that we have a statue on the plaza of our county square in Prescott dedicated to an Arizonan. There is also a statue in Arlington Cemetery in Washington in memory of the same man, an upstanding young man with a brilliant future before him, who, when the Spanish-American war broke out, and his friends urged him not to jeopardize his future and his life, uttered these words in reply: "Who would not die for the privilege of adding another star to the flag of his country!" That was Bucky O'Neill.

Now we are confronted with the proposition in Arizona of another state endeavoring to harass us into accepting a document

that we believe spells death to our state.

We find California saying that they are ready to ratify, and have ratified the compact, but in ratifying the Colorado River compact they betrayed the doctrine of state rights. I read from Chapter 33, Assembly Joint Resolution No. 15 of the California Legislature of 1925, that ratified the compact with this proviso:

"Provided, however, that the said Colorado River compact shall not be binding or obligatory upon the state of California, by this or any former approval thereof, or in any event until the president of the United States shall certify and declare,

- (a) That the Congress of the United States has duly authorized and directed the construction by the United States of a dam in the main stream of the Colorado river at or below Boulder Canyon, and to create a storage reservoir of a capacity of not less than 20,000,000 acre feet of water; and
- (b) That the congress of the United States has exercised the power and jurisdiction of the United States to make the terms of the said Colorado River compact binding and effective as to the water of the Colorado river."

The congress of the United States through the Swing-Johnson bill was to be asked and compelled to divide the water of the Colorado river at the place designated by California and in the manner specified by her, irrespective of the protest of the state that was going to be invaded.

We hold that these water rights belong to the state. But the Swing-Johnson bill says the secretary of the interior shall rule as to the disposal of these waters.

By what authority? Because California says that is the price

of her ratification of the Santa Fe compact.

We have refused not only to ratify the compact on those terms, but we have refused to accept that principle or to recognize for an instant the right of the United States government to control the waters of the Colorado river beyond the control they may have

ever them as navigable waters.

How did the United States government get in on this proposition? The commerce clause of the Constitution gives congress the right to regulate commerce. The supreme court says that in regulating commerce congress has the right to regulate navigation. But under the Swing-Johnson bill they propose to have the government not only regulate commerce, but to construct a dam and go into the hydro-electric power business for commercial purposes, for the benefit of the state of California. We repudiate that doctrine.

We have not denied the necessity for flood control. We have

been ready to give it.

We have not denied the necessity for silt control. We have been ready to give it.

We have not denied the need of California for additional water

for irrigation. We are willing to give it.

We have not denied that it might be expedient to permit the coastal-plain states to get water from the Colorado river that they could use. We have been ready to agree to that.

But California says a dam must be built. By whom? By the federal government at or below Boulder Canyon, to provide for

20,000,000 acre feet of water storage.

There are dam sites in Arizona capable of producing hydroelectric power double the amount this dam would produce.

Then they told us, when we approached them on the question of a tri-state compact, that they would not join us in asking the upper basin states not to withhold water they cannot use, and they said "We cannot do that." Then when we asked them to come up and talk to you, they answered, "We cannot offend the upper basin states by asking them to amend the compact."

They have not been helpful at any stage of the game.

We did endeavor to confer with them; we asked them twice in 1923 for a conference. The first time they said, "No." The second time we asked them to meet two representatives of our state to confer as to the advisability of holding a conference, and the governor of California said, "No, we will not even meet those two men." We have since met the California delegates frequently. But all the time we were meeting, there was on the desk this Swing-Johnson bill. And the discussion hinged on what effect proposals might have on that document.

Then they asserted that we were the creatures of the power trust, and we spurned that suggestion. If any member of our delegation, or any citizen of our state, is identified with the power trust, I do not know who he is. We believe in fighting for our rights and we will fight for them. If we have to take a licking, we take it, and we do not squawk when the fight goes against us. We hold no brief for the power trust. What is the power trust? So far as we know, it is organizations of American citizens, organized into legal corporations authorized to develop and sell power under rates fixed by the states' own corporation commissions, with their earnings limited, and their services specified and determined by public service bodies. Their bonds are held broadcast throughout the land by citizens of the United States, who have the courage to invest in them. Since when did it become a crime for these citizens of the United States to have enough initiative, courage and daring

to risk their money in a commercial enterprise to develop and sell

a commodity needed for use in the United States?

We hear a lot about the Federal Reclamation bureau, and what they have accomplished. Of the irrigated lands cultivated in the United States, only a fraction have been made irrigable by the activities of the Reclamation service. Comparing some of the Reclamation service projects with those of private associations, it will be found that the enterprise of American business men compares favorably with that of federal bureaucrats, as to cost, operation, efficiency or any other test by which you care to compare private enterprises and government enterprises.

But we are told that unless the government develops the Colorado river, California is going to be penalized and is not going to obtain power as cheaply as she thinks she ought to get it. They want the government to dam the river and give the power to California tax free. Arizona will be deprived of a natural resource in order that California might grow by getting cheap power so she may compete with Pennsylvania or West Virginia and draw people

to Los Angeles.

They propose to apply state socialism and have the United States put up the money to give them cheap power by depriving other states of resources belonging to them. We refuse to subscribe

to that doctrine and deny the right of California to ask it.

We have no quarrel with the federal government improving navigation. The supreme court has declared that the federal government has the right to do that. But that is all it has the right to do, except under the terms and conditions of the United States Reclamation Service act, and the United States Federal Power act. And both these acts provide, that if the federal government is going to do anything in the way of establishing or building power or irrigation projects, it must be with the consent of the state where the project is to be located. If we can prevent it, we do not intend to permit the United States government to build that dam under the provisions laid down by California in the Swing-Johnson bill. We have said that we have no objection to California storing water any place she sees fit. We have no objection to allowing all the evaporation required; we have no objection to her diverting it at any place she may choose. But we do object to her specifying in the terms of her ratification and in the terms she has demanded from the congress and president of the United States that they shall meet her dictates. We deny her right to do that, because we believe her idea is unsound from an engineering standpoint, unsound from an economic standpoint, and unfair to the rest of the Colorado River basin.

We believe it is an unfair proposition to predicate the price

of a project on the amount of power to be developed. They say it is going to cost \$125,000,000 for the whole scheme, based on the figures of the Reclamation service. We invite your attention to the estimates of the United States Reclamation service on other projects, and you will find that the actual costs exceeds the estimates several times.

We say the Colorado river ought to be developed in a manner so that its full power and irrigation possibilities will be developed, so that after all the power has been taken out of the fall in the water,

it can then be used for domestic and irrigation purposes.

We believe that the engineers who have testified, with the exception of those connected with the United States Reclamation service, and those under the Los Angeles influence, have testified against the Boulder site for one reason or another. The federal power commission, the Army engineers, the United States Geological Survey engineers, Secretary Weeks, Secretary Wallace and Secretary Work were all on record against the Boulder site.

Until the Swing-Johnson bill was made an administration bill,

they were all on record against that bill.

We do not believe, and the engineering testimony will back us up, that \$125,000,000.00 is necessary to give California flood control, or that \$125,000,000 is needed to enable the federal government to improve the Colorado river for navigation. If California specifies that the federal government must build a dam, then all they have a right to ask the federal government to do is to provide for the improvement of navigation by regulating the floods in the river.

When they ask the federal government to go beyond that and to go into the power business, they are asking for a departure on the part of the government for which there is no constitutional

authority.

If the federal government does engage in the power business, and sells power for commercial purposes, then the states whose territory is going to be invaded are entitled to a revenue equal to the amount they would receive if the project were installed by private

enterprise.

Not a single dollar of federal government funds is needed to harness the Colorado river to provide flood control, control of silt and to provide water for irrigation and domestic uses. We admit that the suggestion I have just made, if carried out, would probably cost, Los Angeles and southern California a little higher rate for power. That higher rate will be determined by the tax rate in the states of Arizona and Nevada. It will be the same tax rate that applies to all other property in those two states. That is all we ask to be applied to the power projects on the Colorado river.

We direct your attention to the fact again that Colorado has only 39,000 square miles, 15% in the river basin; New Mexico has 23,000 square miles, 9.5%; Utah 40,000 square miles, 16.5%; Wyoming 19,000 square miles, 7.8%. Their entire territory in the basin is 49.7%. Arizona has 103,000 square miles, 42.6% in the basin, equal to the combined areas of three of the upper states.

California has 6,000 square miles, 2.5%; Nevada, 12,000 square miles, 5%; Arizona has 43% of the drainage area. The lower basin comprises 50.1% of the drainage area of the basin.

The proposition submitted to you this morning by Arizona, in effect, will insure to the upper basin states all the water they can ever put to beneficial uses. It provides that our government notify the Mexican government that any water made available by the use of American brains and finances shall be retained for use in the United States. It provides that Nevada be given all the water for which she has asked. It provides that the United States make a treaty with Mexico and give her an allotment that comes out of the water available to the lower basin, and that the remainder be divided fifty-fifty between Arizona and California. If that is done and agreed to, we will then go ahead and negotiate for a settlement of the power question, or we will ratify the Santa Fe compact and sign a compact on water alone, with the understanding that the compact will permit river regulation for the improvement of navigation, for desilting, for flood control, and regulation for irrigation and domestic purposes. But no power project is to be put in the river by any one in the lower basin until a contract has been negotiated which will establish the legal rights of the states in the lower

We invite your inspection of the third map there; the Colorado river enters Arizona 330 miles from the Nevada-Arizona state line. To the point where the river intersects the Mexcian boundary with Arizona, is 400 miles more. Eighty-five per cent of the power developed on that river will be developed either wholly or on the border of Arizona. We buy oil from California and Texas now and pay whatever royalty those states levy. We are buying coal from New Mexico, and whatever tax that state puts on it, we pay. We are using that coal and oil to develop electricity in Arizona with which to run our industries and mines. We are helping to support the schools, roads and public institutions of New Mexico and California.

On our side, we have this tremendous volume of white gold. We believe we are just as much entitled legally, morally and every other way to collect revenue from the power which is developed in Arizona as those states are to tax us for the coal or oil they produce.

When we assert that doctrine, we concur in the idea advanced

this morning by our chairman, Governor Dern.

It is an unfair proposition to ask us to ratify a compact that apportions the water on a reservation that it must be done in a certain place, in a certain way, in a certain manner, by the United States government, and then expect our power to pay part of the cost of irrigating lands in the Imperial Valley by gravity and the cost of pumping water over the mountains into the coastal plains. When we get ready to pump water on our Arizona land, under that compact the Arizona farmers would have to pay a tax upon the power that may be developed by the federal government to pay the interest on the cost and maintain the dam and canal and the work in the Imperial Valley, California, and also to pay the interest and the cost of maintenance work upon the dam for the purpose of enabling Los Angeles to pump water over the mountains. That proposal is unsound, unfair, uneconomical, unjust and entirely contrary to the principles and constitution of the United States.

ADDRESS OF HONORABLE THOMAS MADDOCK Member Colorado River Commission for Arizona, Before the Seven-States Conference at Denver, August 23, 1927

I would like to clear up if I might, a few uncertainties which I think appeared to different people yesterday-I know that some things appeared a little uncertain to me-before I start on some of the things I want to say. I would like to suggest that the first paragraph of the Arizona proposal is really a preamble and the rest of the document merely amplifies or explains those things that Arizona

The suggestion made in the opening statement for Arizona of a subsidiary compact is not new. It is not a request to reopen the Santa Fe compact. It might be explained as the same old Tri-State compact—the same old supplemental compact that the Arizona gov-

ernor suggested first in October, 1923.

I would like to suggest that the paragraph in regard to the tributaries is hardly complete. You cannot in a short statement like that completely draw an entire document for the division of the resources of an empire. Originally Arizona asked for all of the water in all her tributaries because she can use it all, and even if she uses it all there would be insufficient water for the state.

Later we offered California—and I see in her governor's suggestion there is mention of this-that when water enters the stream of the main Colorado from Arizona tributaries, it becomes a part of that stream and is indivisable from it and subject to division the same as any other water in the stream. So that would make our tributaries just like your tributaries in the upper basin. The part we cannot use passes on down and becomes available for others below, with this exception, that our tributaries could physically be used in our state, because after those tributaries enter the main stream it is economically possible to take the water out lower down and use it.

There was a great deal of discussion and difference of opinion about the amount of our tributary water; nobody can give it to you exactly. I believe you people here in this state have kept a better stream flow record, better by far, than we have, and yet I doubt if your records are exact. As near as we can tell, there is in the Gila system between three and one-half and four million acre feet. There is one other region in Arizona which contributes almost as much as the Gila, in fact, it comprises a district so great that, outside of the Gila basin, Arizona has an area that contributes to the flow of the Colorado which is greater than the area of any other state in the basin. As near as we can tell there is between two and one-half and three million acre feet of water entering that section of the river each year that we can use. But part of it runs off our mountains and hills into deep canyons, and part of it appears in springs in the beds of the streams, and is not susceptible to use within our own tributaries proper.

I would like to explain, if I could, something that was suggested by Governor Emerson. He stated that he could hardly understand the expression on the part of Arizona that the pending conditions threatened the existence of Arizona. Now, maybe that appears to be going just a little strong, but it is not too strong. We have practically put the Gila under cultivation today. and that means if we have no additional water supply in the state of Arizona we have no future, we have no hope, and without a future and without hope, you might as well have no existence, because as has been said "work without hope draws nectar in a sieve." We want a future; so do you. We are willing to grant it to all of you and we hope that you are willing to grant it to us.

I would like to bring up something suggested by Governor Young. The governor made the statement—this is subject to correction if I err in quoting—"that Arizona opposed a high dam," "that we opposed large storage." We do not; we never have. We sympathize with California's demand, and we realize that as far as she is concerned, there is no reason for her to make any compact with anybody unless she gets storage which will increase the amount of water available for irrigation in the lower reaches of the Colorado. We are for big storage, we are for a great dam. Our only differences are as to where the dam shall be, how it shall be

built and who is to benefit.

We do not oppose a dam in Boulder canyon; we know that Boulder of Black Canyon is a long canyon, a very long canyon. We know that a dam has to be built there before you can economically develop all the river, for there is a lot of power in the fall that exists in the Boulder Canyon region. Now, people in our state do not understand all of these intricate details; the Colorado river question really is not intricate, but there is a multitude of detail, and the ordinary man lacks the time to get it; the ordinary man in California can't get it; you realize that. You are for the Boulder Canyon dam. You have educated your people in California to be for the Boulder Canyon dam. You did that so well that when you found that the Boulder Canyon site was not a good site, you moved down stream some twenty-five miles and called the new dam site the Boulder Canyon dam site, because it was easier to change twentyfive miles of distance than the minds of the people when they became set. In our controversy, with the feeling growing in California for the Boulder Canyon dam, naturally in Arizona has grown the idea that we were opposed to it. But that was the hurried, the quick, thought; it is not the final thought. We are not opposed to a dam in Boulder Canyon, not at all; the differences that exist in regard to it are subject to adjustment.

I had one other thing that bothered me yesterday, one thing I could not understand. My friend McCluskey appeared to get indignant and I could not realize what was the matter with him, as he usually has a very fine disposition. It seemed to me that something was wrong. I spoke to him about it last evening. I could not understand his indignation until he explained it and then I could very readily appreciate it. He said that one of the California members of the commission had made the statement—or at least it appeared in the morning paper—that two of the Arizona delegates here, specifically the two that had been on a previous commission engaged in consultation with California, were more or less creatures of the power trust. Now, the only two members from Arizona who acted on the previous commission are Mr. McCluskey and myself. When he made that explanation I could easily see why he was indignant by analyzing how I felt myself. I do not believe we are going to get anywhere by these personal statements. They are not true. McCluskey was just as foolish as he is now about the Colorado

river, long before the power trust entered into it.

I can show you here an article I wrote in January, 1923, before I ever heard about the power trust in this controversy. Frankly, I have never met any member of the power trust. I do not even know the man who is running our own electric light plant in the

city of Phoenix. It is easy to make accusations.

We might say—we don't want to and don't intend to—that there are over 800,000 acres of land in Mexico belonging to one group of California people. Without water this land is worth nothing. With water it is worth \$160,000,000. Some one in California having a desire to see that land developed might be subsidizing other men here to work in the interest of Mexican land. Again we might say that Arizona having offered everything that the Imperial valley itself may use, there is now no additional demand voiced by those people. We might even say that the officers of that district here were not working in the interest of that district, but in the interests of additional land, outside new irrigation. We do not do that. People are going to act in favor of their own districts, countries, states, nations, and they are going to do it naturally. We do not need any ulterior motive to act that way. I believe the California representatives and every one in Arizona is acting and working for the best interests of their own communities as they see it.

Now, I am a Republican and I live in a Democratic state. I might say I am the non-partisan gesture on this commission. I have been in the party in opposition because of that most of my life, in the position of a critic; I have watched county affairs and state affairs, and I want to say this: The opposition makes lots of mistakes but ninety-nine men out of one hundred in public life today are fundamentally honest.

I understand, and you understand that this question, like all other questions, is going to be settled. I do not know just when, I do not know just how, but it is going to be settled. Therefore, the question is, "who is going to settle it?" I see only three possible instruments or agencies for settling it. One is the supreme court, able, just, above reproach, but absolutely ignorant of this situation. It took them eleven years to adjust a little question between Wyoming and Colorado on one small tributary. I do not doubt but what we would finally get justice from them, but it would be only after the supreme court became thoroughly educated on this particular question.

We might get a decision and adjustment of this question through congress. Congress is political. Congress is busy. Each man has something else that he is interested in far more than the Colorado river. And as Governor Dern said yesterday, in that kind of a settlement the state of Pennsylvania in the lower house would have more influence by its representatives than all the states here. I do

not think congress is a good jury.

There is only one other agency which can settle this question.

That is the states themselves. In my opinion, it is our job and we

should do it.

The suggestion was made yesterday that we ought to have arbitration. A jury is nothing but arbitration. You refer a question to twelve men and they settle it. We tried to settle this one with California and could not, so we came up here. We said "We will pick a jury of our peers, a jury of people who understand the water question and know what we are talking about. We will put it up to them." We are here, ready to do so.

Now, I honor and revere the office of the president of the United States. The suggestion was made that the president of the United States appoint two engineers as arbiters. This matter is vital to us. We are going to analyze every suggestion carefully, and I want to analyze that one a little. I am sure if you were in Arizona's position you would take into consideration that the president is not an engineer. In his life he has not been associated with engineers, therefore, from his immediate acquaintanceship he cannot pick these two men. So he is going to ask someone else to suggest to him the men who would be all right. When he seeks that information and sits down in the recesses of his cabinet, there won't be anybody from Arizona there to suggest, but on the right hand of the president will be two men from California. There will be the Secretary of the Navy-and some of the most wonderful engineers in the United States are in the Navy. Secretary Hoover is the other Californian in the cabinet, able and conscientious—but human, and therefore subject to the love of home we all possess. If the president goes out into the departments, it will be difficult for him to avoid seeing the head of the Reclamation service, another able engineer, Mr. Meade, of California. Naturally suggestions will come from all of these Californians, and we can't help but feel that those suggestions would result in the appointment of men who were not particularly interested in Arizona, or at least who would not start out by being in our favor.

That is all theoretical; let us go into practice. There is a big question to decide between the United States and Mexico, about the Rio Grande, the Colorado ar Tia Juana rivers. A commission has been appointed by the president. On this commission he appoints a man from California, a man from Texas, and a man from the Army. I don't know where the latter lives now. He has retired. Perhaps he lives in California. But at least two of the three members may be from California. Arizona will have no representative on the commission, yet we are deeply interested.

Let us look at another practical example. Recently an advisory committee was appointed by the Secretary of Interior to go into

this Colorado River question. There are two states that are presumed to be more violent, more rebellious as some put it, than the rest, Arizona and Utah. They have no representation on this advisory committee. Can one be advised without hearing both sides of

a question?

Now, I say, Mr. Hoover is human, and I want to point out why. Mr. Hoover recently characterized the state of Arizona as rebellious. I want to show you a little difference. The water question in this case has a parallel. Here is a report of the St. Lawrence River project signed by Herbert Hoover. It takes up the same question of power, and I want to refer you to Page 6 and show you the difference between this man's opinion of the rights of a big state and a little state. It is an unconscious demonstration, just a creeping in of human weakness into a document. Arizona has been characterized as rebellious for asking for control of her power interests. Listen to what is said about New York. Paragraph 4, Page 6, Senate Document 183:

"Fourth: That negotiations shall be entered into with Canada in an endeavor to arrive at and agree upon all these subjects; in such negotiations the United States should recognize the proper relation of New York to the power development in the international section."

If they will recognize interests in Arizona, our state, like he offered to do in New York, we will be satisfied, also contented.

The suggestion of Gov. Young for an alternative jury for an alternative arbitration board could have been made long before. I understand, in fact, I know, that last spring Gov. Dern wrote to all the other governors suggesting a conference with the upper basin governors acting as a friendly adjudication board. It might have been proper for California to suggest an alternative arbitration board at that time. It might have been proper to have this alternative arbitration board suggested during the visit of the California delegation to the upper basin last July. They might have taken the subject up with Arizona on August 4th, when they came to Phoenix. But yesterday-it came just a little tardy for them to ask for a substitute jury when we were ready to present our case. This jury that we ask for can decide this case just like an arbitration board; you are all forming your opinions now. The people of the upper basin states will have those opinions expressed by their senators and their congressmen when they go back to Washington. That will be the report of the jury. How the upper basin men who represent you in Washington act and vote will determine the verdict of the jury.

I want to touch just lightly on Mexico. The Mexican situation reminds me of Mark Twain's remark about the weather. He said,

"Everybody complains about the weather but nobody does anything about it." Everybody complains about the Mexican situation. We had a seven states compact; we had a six states compact. There is not a word in them that restrains Mexico, but there is a strong probability that there is something in there that gives something to Mexico. We have the Swing-Johnson bill that has been pending in congress for three or four years. It has been introduced and changed back and forth by the able representatives of California. I cannot find anything in that bill, after all the talk about Mexico, that restrains Mexico. Therefore, we say, it is pretty near time that we did something about this Mexican situation.

The people who were working and voting for the Swing-Johnson bill do not hesitate to be for it regardless of the Mexican situation. But we think the matter is absolutely vital. If there be anything that we insist upon, it is that something should be done in regard to Mexico. We are not asking anything unfair to Mexico. I believe that even an international tribunal might afford us a decision in this contention. We are asking that the Mexican citizens be put in the same class as the American citizens. That is not giving them any the worst of it. To illustrate, you start an irrigation project today, you put in your storage, your diversion canal, make all your filings and appropriations, comply with the various laws, begin to get people on the soil—you cannot get them all on immediately, you cannot use all the water immediately, but under the laws of the United States and the various states no one else can come in and utilize the benefits of your storage regulation pending your reasonable completion of your entire project and utilizing those things that you yourself have created. All we want is for the state department to kindly notify Mexico that Mexican citizens will be given nothing more than what we give our own people; that they will be limited just the same as we are limited in each of our own states. Now, that is not an unfair request, and I think the national government should not hesitate to grant it.

I want to bring in a few factors for your consideration here, a few facts. You know I am almost surprised at times that California should bother about the state of Arizona or anything we have. California is a wonderful state. They have twenty-two and one-half million acres of agricultural land. They have 6,000,000 acres now under irrigation in that great state. Arizona has about one-tenth that amount. Some people over there in authority say that some day they will' have between twelve and eighteen million acres under irrigation in the great basins of California. If we get what we want —not what we want but what we are asking for—we are some day going to have in the state of Arizona about two and one-half or

three million acres of irrigated land.

California today has 2,000,000 horse-power installed in hydroelectric energy. We have just a fraction of that. Not one tenth, altogether. California has about 9,000,000 potential horse-power. If all the water came down the Colorado, if the upper basin did not take any, we would have about four and one-half million in our state. When you take your water out, as you should, and deplete the supply, we are going to have about three million horsepower in the state of Arizona, or about one-third of what exists in the great state of California. You know, we can hardly figure why they want to come over and take our power, too.

Exclusive of the Colorado, there are 72,000,000 acre feet of water on an average in the state of California every year. There is four times as much water in that wonderful state as there is in the entire Colorado River basin, which we are trying to divide. I have a report here to support this statement. It is their own document, put out by their own officials. It is a part of the water supply papers of the Department of Public Works of California; Table 3, of Bulletin No. 5. Incidentally, if you will look at this you will see that according to the state engineer of California, the water resources in the Mono valley and Owens river country, which Los Angeles is trying to secure, are over four times as much as what they are now using to supply that great city.

I want to touch, and just touch, on the royalty question. That is just a word, and sometimes I think we are afraid of words. They are easy things to be afraid of. Royalty brings up in our minds the idea of King George III. There is really no difference between royalty and tax. Los Angeles pays a tax to one of the counties of the state of California. Los Angeles has acquired water rights in one of the other counties of California. She pays forty per cent of

the taxes in the county of Inyo, or so they testify.

Men who represent the city of Los Angeles, who have handled their electric plant very well, report that in 1924 the city of Los Angeles made a profit on the sale of power of \$2,500,000; in 1925 of \$3,000,000,000. I asked Mr. Scattergood, the head of their power bureau, what was the average horsepower used by Los Angeles. He said it was about 120,000. That would mean that on every horsepower used by the city of Los Angeles there is placed an indirect tax of \$25.00, which is paid by the people who use the power. That money goes into the general city treasury and is there available like money paid by any other form of taxation, to build schools, pave streets, provide public protection, etc. It is a tax, a royalty, or profit, call it what you will, it all does the same thing, just like that tax in Inyo couny.

Los Angeles today buys power—(I am again quoting from the Congressional hearings)—at 82 mills. It is estimated that Boulder Canyon power can be taken over to Los Angeles for 4.25 mills, even when they are trying to amortize the entire cost in a very short period, and in addition, when that project would be carrying a thirty per cent extraneous cost. This thirty per cent really does not belong to the project at all. It is not for the cost of the dam, and it is not for the cost of the power, but is for a California irrigation ditch called the All-American canal. That means about one mill handicap that this power plant must pay for. The difference between 4.2 mills and 8.2 mills, however, means 4 mills cheaper power—call it three to be conservative. It would amount in a year to \$19.62 per horsepower benefit that would come to that community in cheaper power. The city of Los Angeles wants to handle it. I do not see why they should not, because it would mean about \$45.00 royalty, or profit, or tax, coming from something not within their own state but created by virtue of the utilization of resources of adjoining states. Considering this \$45.00 gift from the states of Arizona and Nevada, the California offer of \$1.00 royalty as a kind of a nuisance tax seems small. When they offer us one-forty-fifth of this benefit, we cannot quite see it.

Now, there is a royalty in this question. Every community has the right to levy taxes; they must levy taxes. There is a royalty in the Swing-Johnson bill. It is not paid to Arizona and Nevada, but to California. Roughly, one-third of the appropriation of the Swing-Johnson bill, or thirty per cent, goes to pay for the cost of the All-American canal. This is another thing that we are against. We are not against the All-American canal, but we do not want to pay for it alone. If you distribute the cost of the All-American canal by taxation, over the entire United States, as was done in other reclamation projects, we do not mind. But we do not want to pay for it exclusively. Thirty per cent of the Swing-Johnson bill appropriation goes into the All-American canal. And when you deduct (from the secretary's set-up in his letter of Jan. 1926, incorporated in the report of the majority of the house committee No. 1657), \$500,000.00 for maintenance and operation of the All-American canal, the Imperial Valley is going to contribute to the dam and power plant about two per cent of the cost. Yet they are going to receive thirty per cent from a federal government investment. That means simply this, that the power users must carry the other twenty-eight per cent. Someone has to pay it, for it has to be paid, Twenty-eight per cent of \$19.62 is about \$5.50 royalty every year that the Imperial Valley is placing upon the power users in the form of a royalty; that is more than a fair tax would be in Arizona or Nevada on something that is created in their states.

I might also say that the resources of Arizona and Nevada are to be taken over by the federal government, as specified in the bill, and forever remain in the possession of the federal government. But along the All-American canal there are a lot of good places where they can develop power in the state of California, in their own canal. That same bill written by able men, carefully provides that when everything is repaid, those California power plants located along the canal shall go to the people. There is not a single provision for reversion to the people of Arizona and Nevada of the resources to be taken from those states.

There has been a lot of talk about royalty. Governor Dern brought out something yesterday, and I went back to my grip and found House Resolution No. 7075 introduced January 27, 1926, by Mr. Raker, of California. I have it here. It is the only bill of the kind that I know anything about. It provides that the federal government shall pay a tax upon the federal land, in the states of the West. We may be rebellious and violent, as is alleged by men in high governmental positions, but we never have made any such suggestion as that. We have never figured on taxing the post offices, the army posts, docks, public buildings or the U. S. Navy, if it comes up the Salt River, or anything like that. We do not want to tax the people living on the Indian lands that the government is holding in reserve or has not yet allotted. Those things are the government's and for use for governmental functions, and we have no desire to tax them at all. We render unto Caesar those things that are Caesar's. But when others request the government to go into business and compete with businesses in our state, then we say it is not a governmental function; (under the decision of the federal supreme court, it is not a governmental function), and should be considered just like any other investment subject to taxation.

Frankly, we are afraid if they build the Boulder Canyon dam, that shortly thereafter, the power demands will need the water to run continuously; and irrigation demands will be less in the winter time when less water is used. Then California will ask the government to put in a second dam at Bull Head, Topock, or Parker. It will be done as it is the logical thing to do. The government will own the other plant and operate it, so why not do it and provide the maximum of irrigation and power? Then, after a little, they will need some more power. The people over in California all vote. Those people are going to vote in the election for any administration that will promise not to change the existing policy and make them pay more for their power. The political influence, pressure and power will all be used to build the next dam above, to increase the

amount of power and sell it at just the same price paid for the power from the first dam. They will then get the next one, and the next one, and the next one, all exempt from state taxation. And then they will come up into the upper basin and then too late you here may say "We ought to have stopped them down there in Arizona and Nevada."

It is difficult to talk at this time because we do not know just what California wants. We know what some of their other commissions wanted. But it is a little hard to say that California wants this or wants that without knowing. It has been said that California wants something definite, and that Arizona has nothing constructive to offer, that we are just in opposition. We do not want to be that way and we have been trying to do something that is constructive.

There has never been a government investigation of the Colorado river. There was an appropriation made to make an investigation for the protection of the Imperial valley. That is about all

that has been done.

The government has not drilled any place except sites in Boulder or Black Canyon. Arizona has had to find out from her own resources and from her own ability those things that might offset information given by the government to support the claims of the state of California. We have made investigations. We do not think that a great reservoir in Boulder Canyon is wise. It is hot down there; it is low in both altitude and latitude.

I can hardly believe it, but the testimony from California people is that the evaporation off the Salton sea is eleven feet. One man testified seventeen feet, each year. If I were to make an estimate I would say it would be less. But if it is eleven feet, it means that from the surface of a full Boulder Canyon reservoir, which is 132,000 acres, each year would pass off in evaporation about 1,450,000 acre feet of water. If Boulder reservoir was the only solution, you simply would have to take it. But it is not.

We can see far enough ahead to know that the whole river is going to be developed. If you put in a power plant today in the Colorado river without storage above, and then someone would come along and put storage above, you would have four or five times as good a power project as you would have before, simply because when they regulate the water above, you would have the regular flow instead of the low flow of a stream with which to develop power. Complete development of the canyon, therefore, means that inevitably you must have storage above; storage for power alone. If you had one dam in Arizona just for power, and you wanted to double your capacity, you could do it cheaper by going above and putting in a storage dam than by building another or

several more power plants in the river proper. So, storage is going to be taken care of.

When that storage occurs above and the river is regulated so that the big variation in flow in wet and dry years does not occur, so the big variation in months does not occur between June and say September, they are not going to need much storage in the lower basin. In fact, in our Arizona projects we find we need for regulation only twenty to twenty-five per cent of the total acre feet used each year for re-regulation storage.

If the lower basin gets seven and one-half or even ten million acre feet, we do not need in the lower basin for re-regulation storage in excess of two or two and one-half million acre feet. Any more storage will simply mean that you are storing water there and allowing it to evaporate. Knowing this, we worried about what could be done that would better it, as you must suggest something better and not tear down, when you start to improve. We knew from government reports that there were only three big reservoirs in the lower basin of the Colorado river, the Topock, Boulder and the Glenn Canyon reservoirs, with the latter only partly in the lower basin. Topock is subject to the same evaporation loss as Boulder Canyon, perhaps greater, as it is farther south and a little lower down.

We were handicapped in that the government engineer estimated that the dam at Glenn Canyon would cost \$125,000,000, and a dam could be placed in Boulder Canyon for an estimate of \$41,000,000. We had another proposition to get a dam at Glenn Canyon for \$75,000,000 for about 8,000,000 acre feet of storage. This was practically agreed upon by everyone as being the high figure for the acre feet of storage necessary for flood control alone, the estimate running from 4,000,000 up to 8,000,000. Even that dam was estimated at a greater cost than the Boulder Canyon dam.

We had some reports. We know something of our state, and we thought there might be a dam site that could be utilized for the Glenn Canyon reservoir. The geologists had turned the site down. From an engineering standpoint, it looks like a great dam might be constructed at this site regardless of the rock foundation, if the dam could be built so the pressure would be by an arch on the sides of the canyon, which were good, rather than to have the pressure on the bottom, which was presumed to be bad.

The first opportunity we had, we went up there and took with us a geologist, one of the best known in the United States, who is an authority on the geology of stratified rock. He is now a member of the Pasadena University faculty, Dr. Ransome. He made an investigation of the formation. I need not go into that, but we got a

very favorable report which indicated that the previous report of the geologists might not have been made without complete information. In fact, it indicated that a certain strata of rock was 125 to 150 feet in depth instead of 57 feet in depth. So we found we did not need to put in the kind of dam that depended on the pressure going into the sides, but could put in any kind. We found on examination, after shooting it, that what appeared to be poor rock, was good rock. So we know we have a dam site up there.

Then we looked around for an outside engineer, a man with an established reputation, so that if his report was favorable it would be considered by others in the profession. We obtained one in the city of Los Angeles, a man named Jakobsen, who since became a partner of Mr. LaRue, which makes a strong combination on the

Colorado river.

I am not going to weary you with his report. I do not think

you would want to go into it fully.

I might just comment briefly on who the man is and what he has done. He is a member of the American Society of Civil Engineers; he was awarded the Norman gold medal in 1924—and I presume that means something to you engineers, at least. You can find out about him in "Who Is Who" in the "Engineering World." or in the "Engineering News-Record," under date of Jan 22, 1925. He designed and was interested in the construction of the Pacoima dam in California. He designed the San Marcos dam. He has written articles on the stress of fixed arches. He designed the Los Angeles Flood Control dam. He was engineer for the San Joaquin Light and Power company, and the Kirkoff dam, also a \$2,000,000 dam on the Kern river. He worked for the Homestake Mining company in South Dakota. He has designed dams in Peru and Chili.

He is a dam expert.

From 1907 to 1912, he was in the United States Reclamation service. He was 3½ years with the Salt River project and one and a half years with the Elephant Butte project Engineer Jakobsen's report is here, and he says in conclusion that a safe dam can be built at the Marble Gorge dam site, with an estimated bed rock depth of sixty feet, at a cost of \$15,300,000; at a depth of 100 feet to bed rock, \$16,800,000; at 130 feet to bed rock for \$19,100,000. Those figures are less than half of the estimated cost of the Boulder Canyon dam. So we have this report, and are glad to offer it to the United States Reclamation service or to the United States in general as a constructive suggestion coming from a rebellious state.

Some good may come out of Nazareth.

The amount of storage is 11,000,000 acre feet. Mr. LaRue thought it ought to be only 8,000,000. He thought that was enough. But I

felt that our friends over on the other side of the Colorado were worrying a little so I suggested that he increase the storage, which was done accordingly. The dam would not interfere with the Junction dam in Utah. We do not want to interfere with any other state.

Raising the water elevation to 3,570 feet would mean 13,300,000 storage. That sounds less than 26,000,000. But the moment we get our water division settled there is going to be construction started in the upper basin, which will further add to the storage.

The elevation of the water there is 3,085.

The proposed dam is 457 feet high. One 27½ feet higher would hold 13 1-3 million acre feet.

The Marble Gorge dam would be higher in latitude by over 100 miles. The elevation would be 3,542 as against 1,200 feet at the Boulder Canyon site. There is the additional factor that the surrounding country at Glenn Canyon is higher, making it cooler. It is not so subject to the winds which would have a broad sweep at Boulder Canyon reservoir.

The evaporation would not be anywhere near as great. Might I say that while I think the evaporation of Salton Sea is less than 11 feet, I think at Glenn Canyon it would be five feet per year, per-

haps less.

The power possibilities would be whatever you desire to make them. We considered it for storing water, the elimination of silt and the elimination of drouth. You could put in power as well as at any other place. In fact, you could put in power and transmission lines to carry that power to the coast and still construct a dam and transmission line which would deliver power cheaper than from the Boulder Canyon dam.

In addition to proposing a practical, feasible substitute for the Boulder reservoir, which would store water for both power and irrigation use and be less subject to evaporation losses, we figured that we should show you a practical plan for using Arizona's portion of the main Colorado river. We were advised that you realized we had unlimited land but thought it was impractical for us to put

water on it.

Other states had merely made statements that they could use a certain amount of water. No state had been required to submit to the other its plans for development. Its statement was considered sufficient. Arizona's assertions should be regarded with equal credulity, but like our forefathers in '76, we feel that "a decent respect to the opinions of mankind require" us to show you how we can use the water for which we are asking.

Please understand that this is only one plan out of many. It

may not be the best, it may not be the one Arizona adopts, but it is practical, easily understood and susceptible of development without excessive interest charges.

There are over 225,000 acres in Arizona along the banks of the river that can be irrigated by gravity without any long canals or

expensive diversion works.

There are 120,000 acres which are between this gravity land and a maximum pump lift of 50 feet. An additional 128,000 acres between a 50 and 150 foot pump lift; 243,000 additional under 250 feet; 362,000 additional under 350 foot lift; 292,000 additional under a 450 foot lift; or a total of 1,370,000 acres which can be irrigated by an average pump lift of less than 250 feet. Remember it is the gravity lands and lower pump lifts which would come first with the cheap water costs.

The higher lift projects would be contemporaneous with the more expensive ones that are being postponed in all your states

today.

These figures are net agricultural areas taken from the advance topographical sheets of the United States Geological survey, made this year, together with a soil survey. They by no means exhaust our agricultural land that can be irrigated, but these areas will require as much of the Colorado river water as we are insisting we should have. We could use the entire river, but we are asking for about a quarter of it.

Mr. Mulholland, city engineer of the city of Los Angeles, estimates that he could raise water out of the Colorado 1,600 feet over the mountain for five cents per 100 cubit feet, which would be equivalent to \$21.78 per acre foot. Later figures made by various engineers show that they can pump that water over to California,

across the mountains, for from \$14 to \$17 an acre foot.

It is possible on this entire project that we outline here to take care of the pumping cost of four acre feet at \$7.70 based on five mills power and four foot duty. Dropping that down to four mills power and three feet duty, you would have \$4.62. I am not speaking of acre feet, I have put it in acres irrigated. Maybe that seems high to you, but again I want to go to California for information and refer you to some of the prices that are paid for water over in that wonderful state at the present time. This is from Bulletin No. 8, State of California Department of Public Works, 1925. Here are the prices and they run \$56, \$44, \$45, \$38, \$27, \$10, \$10, \$12, \$18 \$10, \$17.

There is another group of California costs, both in acre feet and per acre irrigated, that run as high as \$51 per acre irrigated, and run as high as \$48.87 per acre foot. There is not much water being applied at those excessive costs. What I want to bring out is this:

all of Arizona's land can be irrigated for a fraction of what they are now paying in California. The statement was made yesterday that it was thought that Los Angeles wanted the water that they ask for, not for domestic use, but for irrigation. I believe that is true.

I want to refer to Bulletin No. 9, Supplemental Report on the Water Resources of California by Paul Bailey, 1923, for proof. This whole book is full of information. We have been accused of being a "Dog in the Manger," not doing anything ourselves and not letting anybody else do anything. Of course, we suggested that they might develop their own power, instead of asking for ours. But I want to show what is the matter right now with irrigation in California. This is on page 11, second paragraph.

The 1923 report observes, "There are now perhaps, a million or more acres in California fertile enough, and with water at hand, but which are failing to produce adequately to pay for all the costs including improvements on the land. Much of this is in large holdings and in new districts that have recently been brought under irrigation and, although it will undoubtedly be closely settled and produce to capacity within a few years, at present these lands are lacking in numbers of tillers of the soil to respond to the propitious

agricultural environment of the State.

"The cause of these large areas being only partly occupied does not emanate from sluggishness in the rate of settlement on California lands, for California is outstripping all other states of the Union in the rate of its increasing agricultural production. On the contrary, the cost of the only partly occupied irrigated land issues directly from the large size of new projects, that in a year or two, bring under irrigation in one community, an area of land greater than can be absorbed by normal growth within as many decades. During these years, many tracts, making little use of the available water supply, are heavily taxed to pay the costs of works unused by them."

Why should California's demands be so great for water, with a million watered acres unproductive?

I turn now to page 14.

"A further survey of southern California conditions in the fall of 1924 corroborates the findings of the 1923 report and also indicates that, instead of expansion being limited to 250,000 acres, about a million acres of new land may be furnished domestic, irrigation or industrial supply by co-ordinating local development with the importation of water. Three thousand cubic feet per second would eventually have to be obtained. There being no nearby source of additional supply, great works to bring in water from a distant source will be necessary. **Preliminary reconnoissance indicates that such**

a supply may be had from the Colorado River."

This is proof that California wants the water on the coastal

plain for irrigation.

They suggested 1,500 second feet or 1,095,000 acre feet per year. I saw recently that California people, through a new organization, suggested that they should have 75,000 miner inches; and that is 1,875 second feet, or a 25 per cent increase. But in the Bulletin here it suggests doubling the 1,500 second feet, up to 3,000 second feet, or 2,170,000 acre feet per year.

California and Los Angeles now have water enough for their present population, and the other towns around Los Angeles have

water enough for their populations.

Mr. Bailey in his report states that there is not much difference between the water consumption in the irrigated area and their cities, as similar areas consume about the same. As land now irrigated

becomes a part of cities no more water will be necessary.

So if you consider the water supply now, and the additional water in the Mono Lake and Owens River Country, which is four times as much water as they now use, I think it is rather obvious that the cities over there are not asking for water for domestic uses. What they want to drink, in my opinion, the state of Arizona would be glad to give them. If they really need it for that, it is immaterial what the amount is, for they can have it.

Our idea of a general plan for Arizona was to avoid the very thing which they are claiming was detrimental to California-bring-

ing in too much land too quickly.

We have had ideas suggested in Arizona you gentlemen have heard ridiculed-I may say they are a little ahead of the times-the High Line Canal, and a long tunnel proposition. Eventually the power in that river may be so valuable that those things will have to be. Eventually the wealth created in Arizona may be so great that it will carry the bonds for gravity conduits and let power go elsewhere. and transfer what would be in the beginning, a pumping proposition, into a gravity project. But we do not need that now. We can start right now with projects which can secure water cheaper than what they are now paying for irrigation in California.

We can pump our whole share of the water on to our land.

We assert that power developed in the States of Arizona and Nevada, mostly in our state, that is going to pump water on land, should pump it on to Arizona or Nevada land. As an economic proposition it is better to pump it 250 feet, including all of our allotment, than to pump it 1500, 1600 or 1700 feet over the coastal mountains.

Ours is the best economic proposition.

Our total resources will produce more for a future people by using a 250 foot lift than by using a 1500 foot lift to put the water on the coastal plain. If California can lift water by power over there, we contend that we can more than do it here. We can put it in gradually, put the land under cultivation just as fast as the people in this country will absorb the products.

Our project covers approximately the same land outlined by Mr. La Rue. We started out on the gravity canal idea suggested by Mr. La Rue for the Parker-Gila project. I want to say this for Mr. La Rue—when I talked about getting away from the big investment, and suggested a proposition which could be started immediately and proceed gradually, he absolutely agreed with me—and engineers, like lawyers, do not always agree. He said, "That is the only way to do it."

It means that the Arizona project would not be carrying enormous interest costs during the time when the land was not in production.

This land is fruit growing land, citrus land. It raises grapes, in fact everything that they can raise in California can be raised in

Arizona.

Looking at it from a humanitarian standpoint, it is cheaper and more economical to put the water here in Arizona than over the

mountains in California.

I am not going to weary you any more. I think it is customary for lawyers to draw up for the judge the instructions and law for the jury. I would like to imitate them just a moment. You are the jury here. Public opinion is the final earthly jury on everything. You have listened patiently for two hours and I deeply appreciate it.

It shows that you are fair and will be just.

We ask that you give equity to the small state as well as to the one that is large; that you apply the law of economics, the law of kindness; the law of necessity. The law of necessity has made us willing that our reservoirs be used to protect and safeguard, and reduce expenses in, the Imperial Valley; to give them flood protection, silt storage and drouth elimination. Those are the things they need; that is their necessity, and under that law we grant them. We are asking under the same law for the necessities of our future.

We are asking that you also use the new law, "The new com-

mandment which I give unto you, that you love one another."

Now, you have an older law, and it is harsh. I do not want you to use it against my state when rendering your verdict. We only have the new law and the old law.

People who would go into a state to take its resources, use the old law. It is the jungle law, the law of the tooth and the claw, the

law that he may take who is strong enough and he may keep who

We do not want you to use that old law, because, if it is carried out—this old principle that has caused the war and crime of centuries—it means the death of a state as a state.

And Arizona is one state that does not want, and if possible,

does not intend to die.

SPEECH OF SENATOR A. H. FAVOUR

Member Arizona Commission on the Colorado River, at the Seven States Conference in Denver, August 25, 1927.

In the time allotted to me I shall confine myself to an explanation of Arizona's basic points, and a discussion of these claims as compared with California's claims. It may be that after this explanation we shall not find ourselves so far apart. It is the honest desire of my state that a just and fair agreement may be made between the lower basin states and the matter concluded at this conference.

Arizona's Position

Our basic points submitted at the opening of this conference contained one introductory item and four items relating to water. These five items I shall consider. The last three items relating to power, I presume will be taken up at a later date in the conference. The basic points relating to water, read as follows:

Item 1. That Arizona will accept the Colorado River compact as agreed upon at Santa Fe, New Mexico, if and when the same is supplemented by a subsidiary compact, which will make definite

and certain the protection of Arizona's interests.

Item. 2. That before regulation of the Colorado river is undertaken, Mexico be formally notified that this country reserves for use in the United States, water made available by storage within the United States.

Item 3. That any compact dividing the waters of the Colorado river and its tributaries, shall not impair the rights of the states under their respective water laws, to control the appropriation of

water within their boundaries.

Item 4. That the waters of the tributary streams of the Colorado river systems entering the river below Lees Ferry (and which are inadequate to develop their own valleys), be reserved to the states in which they are located.

Item 5. That the water of the main Colorado river which is physically available in the lower basin (but without prejudice to

the rights of the upper basin states), shall be legally available to and divided between Arizona, California and Nevada, as follows:

A. To Nevada, 300,000 acre feet.

B. The remainder, after such deductions as may be made to care for Mexican lands, which may be allotted by treaty, shall be divided equally between Arizona and California.

California's Position

Our sister state, through its governor, has submitted alternate claims covering the same points at issue relating to water division which read as follows:

1. To Arizona and Nevada their tributary waters, subject, however, to the condition that any tributary waters not used, and reaching the main stream shall be deemed part of the main stream flow for the purpose of the agreement.

2. To Nevada, 300,000 acre-feet per annum from the main

stream.

3. To Arizona her present perfected rights to 233,800 acre feet per annum, and to California her present perfected rights to 2,159,000 acre feet per annum from the main stream; the balance of the water of the main stream below Lees Ferry, subject to the terms of the Colorado River compact, to be divided equally between Arizona and California, subject, however, to the provision that any part of the allocation of either state not put to beneficial use in said state within 20 years, shall hereafter be subject to appropriation and use in either state, pursuant to its laws.

If Arizona is unwilling to accept any of these offers then California is willing to submit its case to an impartial tribunal as here-

tofore indicated.

Both the proposition of 1925 and the proposition of 1926 to which California has already assented still hold good as far as California is concerned. If Arizona is still unwilling to accept these eminently fair offers, or either of them, California is prepared to make a further offer:

1. To Arizona and Nevada their tributary waters, subject, however, to the condition that any tributary waters not used, and reaching the main stream, shall be deemed part of the main stream flow

for the purposes of the agreement.

2. To Nevada, 300,000 acre feet per annum from the main

stream.

3. To Arizona, her present perfected rights to 233,800 acre feet per annum, and to California her present perfected rights to 2,159,000 acre feet per annum from the main stream; the balance of the water of the main stream below Lees Ferry, subject to the terms of the Colorado River compact, to be divided equally between Arizona

and California, subject, however, to the provision that any part of the allocation of either state not put to beneficial use in said state within 20 years, shall thereafter be subject to appropriation and use in either state, pursuant to its laws.

If Arizona is unwilling to accept any of these offers then California is willing to submit its case to an impartial tribunal as here-

tofore indicated.

The reference of submission of the controversy to an impartial tribunal is set out in a separate document presented by Governor

Young of California, that part of which reads:

"In consideration of Arizona's becoming a party to this seven state compact, I therefore propose that after the four upper basin states have received the 7,500,000 acre feet which the compact grants them in perpetuity to care for their possible future needs; after Nevada has been given her 300,000 acre feet; after Arizona has been granted all the water for irrigation and domestic uses she can take out of her tributary streams; after the perfected rights of Arizona through existing irrigation uses have been satisfied and the same has been done for California; that, after all these things have been effected, the relative percentages of the remaining flow of the Colorado be equitably apportioned between Arizona and California according to whatever practicable and economic use for domestic purposes and irrigation each state can make of this water, as judged by an impartial and unprejudiced tribunal.

"I furthermore suggest, inasmuch as every one of the seven states here represented is interested in the prompt settlement of this controversy that the commission for determining this allocation be composed of one representative from each of our seven states together with two engineers appointed by the president of

the United States."

Arizona has considered the proposals of California very carefully, even Mr. Chairman, I might say, prayerfully. We have considered them along with our own and we cannot help but feel that if California and this body understood the equity and justice of Arizona's basic points, this conference of governors would be ready to recommend an acceptance of our proposals and our sister state of California would be willing to enter into a supplemental compact based thereon. I believe Governor Young of California, his commission and advisors, to be open minded and willing to consider our claims. In our informal discussions with them I was impressed that they desired, as we do, a fair and honorable settlement of these differences between us.

The question has been asked what is the meaning of the first

item of Arizona's point:

"That Arizona will accept the Colorado River compact as agreed upon at Santa Fe, New Mexico, if and when the same is supplemented by a subsidiary compact, which will make definite and certain the protection of Arizona's interests."

That is an introductory statement setting out the conditions by which all controversies over the Santa Fe compact may be settled. The Santa Fe compact was drawn up in 1922 and accepted by certain of the states and rejected by others. Insofar as the states are concerned which have ratified it, they are not protected by that compact. It is an open document. Those who have ratified, are bound, but those who have not ratified are not bound. I believe I state it correctly when I say that you want to get the compact ratified by all of the states, and we are here to help because we are interested as well as you, in settling this interstate question. Arizona says in this first item we are willing to accept the Santa Fe compact provided there is an Arizona, California, Nevada compact supplemental to the Santa Fe compact. It seems that when such an agreement between the lower basin states has been arranged, acceptable to us, then the two compacts would come up for consideration before the legislature of the state of Arizona, and if accepted, both compacts would be simultaneously ratified. We presume California and Nevada would follow the same procedure. In that item we are proceeding on the assumption that our ratification would be unconditional, and we should not agree that either California or Nevada's ratification should be conditional upon the building of the Boulder Canyon dam or a Swing-Johnson bill, or any other contingency. Once ratified by all the states interested either in the Santa Fe compact or the supplemental compact, the two compacts would then go back to congress and if approved by it, the controversy would be settled definitely and for all time. That introductory item means more, it means until this procedure is carried out, there is no seven state compact, no six state compact, in fact there is no compact that in any way binds Arizona or any other state. My friends, that point does not mean that we propose to amend the Santa Fe compact, or throw aside the Santa Fe compact and draw a new compact. The Santa Fe compact will stand as it is drawn, but, it will be supplemented by an agreement between the lower basin states. If that is not clear, I shall be glad to answer any questions as far as this provision of our position is concerned.

Mexican Situation

Let us now proceed to the second item of Arizona's proposals, relating to the Mexican situation, which reads as follows:

"That before regulation of the Colorado river is undertaken,

Mexico be formally notified that this country reserves for use in the United States, water made available by storage within the United States."

There does not seem to be the slightest difference of opinion among members of this conference in regard to the ultimate object to be obtained in regard to Mexico. We seem to be all agreed and I have not heard even a suggestion raised that the proposal set out in the paragraph is not the proper position for every state in the Colorado river basin to take. We have had expressions on the floor, even entire speeches devoted to the Mexican situation, urging this conference to do something. If it is the proper thing for us to notify Mexico, then cannot this body provide the way and means by which that can be carried out? It may be by compact, resolution, a memorial to the president of the United States or some other means. It might even be that each state here represented should go back to Washington and there present our case before the proper branch of the federal government. We are all agreed that we want to have this matter brought to Mexico's attention and that country notified. There being no disagreement as to the principle set out in this second basic point, we surely can agree as to the procedure.

State Laws

The third item treats of the states' right to control water within

their several boundaries.

"That any compact dividing the waters of the Colorado river and its tributaties, shall not impair the rights of the states under their respective water laws, to control the appropriation of water within their boundaries."

It may be that this statement was not altogether necessary. We put it in by way of precaution, in view of the fact, that we did not want it understood that entering into any compact would change our existing water laws. This principle has been enunciated in constitutions, decisions and state laws of the various states. I understand that Wyoming has a constitutional provision to this effect. I am told that Colorado by its supreme court has ruled to this effect. The United States congress has recognized this principle in the Federal Power and the Reclamation Acts. It is a law of our state. Over in our sister state of California, they have gone somewhat beyond the principle and even contend that they can control the water not only in their own state, but extend to where the water goes into another state. I would refer you to Sec. 1410A, Kerr Cyc. Code of California, 1920:

"The entire flow of water in any natural stream which carries water from the state of California into any other state is subject to use in the state of California, under the laws of the state of California, and the right may be, so far as not already acquired by use in the state of California, acquired and held under the laws of the state of California. The right to the use of such water held under the laws of the state of California, shall be prior and superior to any rights to the waters of such streams held under the laws of any other state."

Since we do not any of us intend to modify the existing laws respecting water in our several states, then in a supplemental compact, it might be well to so state this principle.

Tributary Streams of Arizona

Now we are come down to Item 4, relating to the streams within the state of Arizona:

"That the waters of the tributary streams of the Colorado River system, entering the river below Lees Ferry and which are inadequate to develop their own valleys, be reserved to the states in which they are located."

We come to the first place where there is a difference. Arizona's claim is that she is entitled to all the waters of her streams. California maintains that she is willing that Arizona should have the waters of these streams, but the water which Arizona is not able to use before it reaches the main channel of the river should become a part of the main stream flow. I am inclined to believe that if all the cther points were accepted by California that we would be agreeable to the limitation placed on our claim by California, in regard to these streams. Considerable has been said about Arizona tributaries and it might be well for us at this point to make clear our position in regard to the tributaries and what in fact we give up if we concede to California's modification of our basic point. Arizona's tributaries are her right under the Santa Fe compact. Governor Emerson and Mr. Norviel, present in this conference, signed the Santa Fe compact, and I believe that they will bear me out when I state that the million acre feet provided in Article III was intended to cover the tributaries of Arizona. If that is so, then certainly it was never intended that any other state than Arizona should have the beneficial use of the water provided in Subdivision of Article III of the compact. Again California minimizes the amount of water which Arizona tributaries would be supplying to the Colorado river after Arizona has taken what she can use. In other words, they say that the difference between Arizona's proposal and California's proposal amounts to very little. We say if we conceded California's position we would be contributing far more water to the main flow of the Colorado than California admits we would be contributing.

I am informed on good authority, and the figures can be checked up, that the Little Colorado river contributes to the main channel over a million feet a year. I have had personal experience with that stream during flood time and I can well appreciate the flow of water that goes down stream into the main channel of the Colorado river. It is true that it is a heavy contributor only during flood time, but that is what we are dealing with in this compact, flood water. If you will check up the drainage area of the Little Colorado and take into consideration the precipitation on that area, you can calculate the amount of water going into the main stream of the river. addition to the Little Colorado, we contribute the waters of the Cataract, which are not less than 250,000 acre feet per year. We have the Bill Williams and innumerable smaller streams flowing into the Colorado. If you take the measurements at Lees Ferry and Topock, you will note that there is an increase of about a million acre feet between these two points and it comes from our streams. There is this increase notwithstanding the loss through evaporation and seepage. The point I want to make clear is that should Arizona agree to accept the limitation placed on its claim to its tributaries by California, Arizona would be actually giving up a substantial amount of water and we believe relinquishing a right intended to be hers by the Santa Fe compact.

Mr. Carpenter (of Colorado): Can you use that water?

Senator Favour: No, not all in the basins of those tributaries, but we could use it further down the Colorado river by retaking it from the main channel.

Mr. Wallace (of Utah): Might I ask a question? Your claim is to the waters of those tributaries from the tributaries themselves and after it becomes a part of the main stream?

Senator Favour: That is our claim, but we might be agreeable to California's position that we use the water as far as we can in the state until it is merged with the main channel of the river. It is probably a fact that instead of the 200,000 acre feet which California says would be contributed by Arizona, we are in truth contributing two million acre feet of water to the river. Along this line, might I ask the question: What would be California's position if it were that the tributaries flowing into the Colorado river came out of that state? The law of that state, as I have quoted above, provides that the entire flow of the streams of that state are subject to use in the state of California under the laws of that state and are superior to the right in such streams under the laws of any other state. I wonder would they consent to the suggestion that any other state had the right to demand the use of or acquire any right in such waters.

However, we are willing to accept that condition placed on our provision by California provided the other difficulties may be cleared out of the way.

Allocation of Water

Up to this point there is no great difference between California's position and that of Arizona. We now come to the fifth item and the chief question of dispute between the states so far as water is concerned:

"That the water of the main Colorado river which is physically available in the lower basin (but without prejudice to the rights of the upper basin states) shall be legally available to and divided between Arizona, California and Nevada, as follows:

A. To Nevada, 300,000 acre feet.

B. The remainder, after such deductions as may be made to care for Mexican lands, which may be allotted by treaty, shall be divided equally between Arizona and California.

In order that you have the exact question between us, I will

again restate the California claim:

"2. To Nevada, 300,000 acre feet per annum from the main

stream.

"3. To Arizona, her present perfected rights to 233,800 acre feet per annum, and to California her present perfected rights to 2,-159,000 acre feet per annum from the main stream; the balance of the water of the main stream below Lees Ferry, subject to the terms of the Colorado River compact, to be divided equally between Arizona and California, subject, however, to the provision that any part of the allocation of either state not put to beneficial use in said state within 20 years, shall thereafter be subject to appropriation and use in either state, pursuant to its law."

Since we are both agreed as to Nevada's share, we need not discuss that further. In comparing the claims we find that the differ-

ence is as follows:

Arizona demands one-half of the water available, which not only includes the 7,500,000 acre feet per year allocated by Article III of the compact but also the unallocated waters subject to such allowance as may be accorded to Mexico. California claims that only the 7,500,000 acre feet per annum be divided and of this amount, there first shall be given to California 2,159,000 acre feet to cover her present perfected rights, and to Arizona 233,800 acre feet to cover her present perfected rights, the remaining 5,207,000 acre feet to be divided equally between Arizona and California. California makes no offer to divide the unallocated water. Moreover, she attaches a twenty year limitation to Arizona's share of the allocated

waters, which in effect means that within that period Arizona must

actually put the waters to use or lose them.

Up to this point, we have not been very far apart, but here we find that our respective states have proceeded on a different theory and on a different basis. We believe that in our statement of our claim, Arizona is within the exact spirit and theory of the Santa Fe compact. And conversely we believe that California has departed from the theory of that compact. The Santa Fe compact divided the waters of the river between the two basins and then provided in Paragraph VIII, that out of waters so allocated all perfected or other rights should be taken care of. Inasmuch as the lower basin at that time in 1922 had more water actually put to beneficial use than the upper basin, why did not the framers of the compact take that into consideration, when they allocated the waters, if they were going to divide the waters on California's theory? was drawn up on the theory of the allocation of water between basins and irrespective of vested or other rights. Therefore, when we come to make a further allocation as between states of the water allocated to any basin, we should proceed on the same reasoning and divide accordingly.

Mr. Wilson (of New Mexico): Is it not true that in the figures submitted to this conference the upper basin showed one million and a half acres actually in cultivation and the water used in the The northern lower basin covered a little over 900,000 acres? basin states showed over 500,000 more acres than the lower basin.

Senator Favour: Very good, I will admit the accuracy of your statement. If it does show 500,000 more acres in the upper basin states, why did they not proceed to take that into consideration in the allocation of the water? Why did your basin only get one half of the water of the river? They disregarded it entirely and said we will give to each basin a certain amount of water and out of this water, each basin shall take care of the perfected and other rights. I do not care which way you put it, whether it is more in the upper basin or in the lower basin, the fact is they proceeded on a different theory from that which California is now advancing. Arizona has offered to split the waters equally between the states. We can use that water and more than our share, use it to a good advantage to develop and build up our state. Why should it not be equal between the states? Each is a sovereign state and equal in the union of states. Has California any more right to demand the lion's share than we would have? In fact, taking the equities into consideration, she has not the basis for such a claim as we would have. fifty division of these waters is fair, just and equitable. As we have studied California's claim as to division, we under-

stand her theory to be that she would deduct the water necessary for the perfected rights and then divide the balance. Are they perfected rights, or are they the equitable claims which each state has on the waters of the river? Even assuming that the position taken by California is correct, let us analyze it and see where it brings us. You will recall that yesterday the engineer was presenting California's claims and in reply to my questions as to the average acreage cultivated in the Imperial Valley for the past few years, his reply was that it was about 370,000 acres, and there was an actual acreage on the Yuma side of the Colorado river of 15,000 acres, and in the Palo Verde Valley 36,000 acres, making a total of 421,000 acres in cultivation on the California side of the river. Assuming the water duty of 4.3 per cent as testified by Mr. Dowd, that would give to California a claim based on that theory of 1,810,300 feet, instead of 2,159,000 feet as set out in their claims.

Now then, following out the theory advanced by California, we submit that the 233,800 feet for Arizona is not correct, for we have in actual cultivation on the Arizona side of the river the following acreage: Yuma, 49,000; mesa lands, 7,000; near Parker, 6,000; scattered up and down the river, 3,000; making a total of 65,000. Applying the water duty of 4.3 per acre, it would give Arizona 279,500 acre feet.

There is still one other situation in Arizona that has not been considered by California. We have Indian lands in Arizona that are entitled to water, as follows: On the Colorado River reservation on the Arizona side, 123,000 acres; and Mohave reservation, 24,855 acres; Cocopa Indian reservation, 400 acres, making a total of 148,255 acres with a water duty of 4.3 per acre, or 637,496. If we add Arizona's rights together we have 916,996 acre feet instead of 233,800 as stated by California. In regard to the Indian lands, Article VIII of the Santa Fe compact reads as follows:

"Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian Tribes."

All of these Indian lands are therefore outside of the compact, or the waters necessary for these lands under the Winters' Decision of the supreme court of the United States, must be taken care of before any water can be used by the states. Furthermore, the compact in Article VIII provides that all rights to the beneficial use of the water of the river shall be satisfied solely from water apportioned to that basin. And, I am of the opinion, it would follow that such waters for Indian lands would be taken from the share of allocated waters going to the state where the Indian lands are situated. These Indian lands are entitled to water from the Colorado river, and it must come out of Arizona's share. We have a direct represen-

tation by Mr. Burke, the Commissioner of Indian Affairs, that these lands are entitled to water irrespective of the compact, and therefore must be taken into consideration, based on the theory on which California is proceeding. If we therefore applied the same yard stick to California and Arizona, we would find that California's proposal should read 1,810,300 acre feet to California and 916,996 acre feet to Arizona, and this on the reasoning of California, which we submit is neither fair or just to Arizona. Rather, this conference should accept Arizona's basis for division—namely fifty-fifty basis.

Limitation of Time

California, in her proposals, requires that the water allocated in the proposed amendment, should be limited as to time within which it might be put to beneficial use. The meaning of their proposal is that any part of the waters allocated to either state not put to beneficial use in said state within twenty years, shall thereafter be subject to appropriation and use in either state, pursuant to the

law of appropriation.

I question if California meant this in seriousness. The compact provides in Article III that the waters apportioned to the upper basin and to the lower basin were in perpetuity. That means absolute title, a fee absolute, and an ownership that is unqualified. It is the best title known to the law. That being so, why should any state be required to relinquish claim to that which they own absolutely, because they don't see fit to use it within a period of twenty years? It is unthinkable and violates the very theory and fundamentals of the compact.

Even in the matter of the unallocated waters, the compact provides that these may be equitably apportioned in the year 1963. Yet California wants to shorten this period so that after twenty years she may acquire this water. I feel a mere statement of this claim answers itself. It could not be supported by any valid argument or sound reasoning. Therefore, while California has advanced the

proposition, I do not think we need to dwell on it.

Division Based on Equitable and Economic Uses

California's proposals are based mainly on the fact that they maintain they may put the water to a more economical use than Arizona can at the present time. This fact we dispute. California can only use the water by an enormous government subsidy. If Arizona were given only a small part or fraction of that subsidy, she now could put to an economic use all of the waters of the river, and we believe to a much better use than can California, with its Boulder Canyon dam and All-American canal.

The claim of California is based upon a wrong hypothesis. The

Santa Fe compact was based on the theory that there was a definite allocation of water in perpetuity to the states. That meant that there would be given to the states a certain proportion of the waters of the Colorado river. Each state is a sovereign state, and one state could not say to another state, that they were entitled to more water, by reason of the fact that they could put it to immediate use or get a greater return from the water. If that had been the case, then why was there allocated to the upper basin states one-half of the flow of the river?

Again, who can say what is the most beneficial and greatest economical use? Can it be said that pumping water 1700 feet over a mountain range to the coastal plain of California, there to be used partly for subdivisions and new lands and partly to save the citrus groves now growing, is putting the water to a more economical and beneficial use than to pump the water 200 feet on to Arizona's land, land which we contend would produce better and surer crops than that on the coastal plain? Who will decide this question? Who will decide the equities between the mesa lands about the Imperial Valley and the mesa lands in the Parker-Gila Valley? The rule as laid down by the supreme court of the United States in the Kansas-Colorado case, was that in dividing waters between states, there should be such a division of water that it would not injure or destroy the equitable benefits to be derived by the two states. We have therefore the states' interests to determine and this is a controversy, not between the Imperial valley and the state of Arizona, but rather, a controversy between the state of California and the state of Arizona. Arizona will decide for herself what use it will make of the waters allotted to her.

I submit that Governor Hunt would be acting improperly if he should abandon that principle, and I feel very sure that Governor Young would not consent that the people of the Salt River valley in Arizona, or in the Yuma valley, should tell his state how water

allocated to California should be used.

Unallocated Water

In order that you may have the full plan of Arizona, we submit that there are two types of water to be divided; first, the water that has been allocated to the lower basin states, and secondly, the unallocated water. From the unallocated water, there must be set aside such an amount as the United States of America shall by treaty allot to Mexico, and the balance of the unallocated water, Arizona contends, shall be divided one-half to each state. We do this for the reason that if no provision is made in regard to this unallocated water, we would be abandoning all title to it, since it would be put

to use upon the completion of any developments in the Colorado river. So far as the upper basin states are concerned, we are willing to make this allocation without prejudice to their rights. In 1963, the compact provides that there may be a further equitable apportionment of these waters. That, we are not seeking to change. The upper basin states can not object to this, because it must have been within the contemplation of the makers of the Santa Fe compact that such unallotted waters would be put to use. That part of the controversy is a matter between only California and Arizona. However, in order that we may not change those conditions which were accepted by the upper basin states of the Colorado river, we are willing to put in the provision that this division shall be without prejudice to such rights as are given to the upper basin states. In California's claims, no mention is made of unallocated water. This should be taken care of and it may be that California overlooked that point in her claim, but meant it should be divided.

Arbitration

Before I close, the seemingly fair suggestion of California of arbitration should be cleared up. I shall not spend much time on this suggestion of California that the matter be left to an impartial body. In California's first offer to arbitrate this matter, they were asked the question if they would agree to stop any effort to devolop the river until the matter had been concluded, and the reply was that they would not. Therefore the suggestion to arbitrate means that they propose to have a dam constructed and an All-American canal, take water over to the coastal plain and get all the benefits thereof, and arbitrate thereafter.

It seems very clear to me that if this were done, there would be nothing further left to arbitrate. Again, the suggestion of arbitration providing for one man from each state and two engineers from the United States government, would not be such a body as Arizona could submit her case to. I presume that this board would be appointed by the president, by and with the advice of his cabinet Since California has two members in the cabinet and Arizona has none, the body suggested would hardly be the one to decide our rights. Without casting reflections on any such body,

we would rather prefer to defend our own rights.

Moreover, it is a well-recognized fact that no state could submit to such a tribunal with the idea of a final decision or conclusion. Decisions which affect the sovereignty of the state by such a tribunal could not be final and conclusive. The most that it would mean would be a fact finding body that could only report their findings back to the legislative and executive departments of the state, to be received and acted on in due course, and according to the con-

stitutional limitations of each state.

Therefore, we find that this suggestion of California means nothing, since they desire to go ahead with the development of the river and the submission could not be binding or conclusive upon either state. I might therefore ask the question, what would happen provided we did consent to such a plan, and the river was developed, and after the finding of the body, California's legislature would refuse to accept the decision of the body appointed as suggested? We are here assembled in a conference to settle this very question. This body is more competent to decide these questions than any other that could be created. We could not agree to a change of venue of this controversy before we have had a hearing, a change of forum before we have had a trial. We feel that every effort should be first exhausted by this conference before we should admit we cannot agree.

Conclusion

These, gentlemen, are my views on the respective claims of Arizona and California. I feel we are fairly close together; less than a million acre feet of water lies between our respective pro-

posals.

In the interests of fair dealing, in the interests of carrying out the original purpose of the compact, for the welfare of state rights, and the settlement of controversies between states rather than by congress, for the developing of the Colorado river, and a settlement of a vexing controversy between states which should be friendly and whose future welfare is bound up with each other's prosperity, it is my earnest hope that our sister state may see its way to accept our basic points as submitted.

SPEECH IN REBUTTAL BY HON. MULFORD WINSOR

Secretary Arizona Commission on the Colorado River Before the Seven States Conference in Denver, August 25, 1927

MR. CHAIRMAN, GOVERNORS AND REPRESENTATIVES OF THE UPPER BASIN STATES:

One important point I believe has been overlooked this morning. Yesterday at the invitation, and through the kindness of Governor Adams, we enjoyed a splendid ride through Denver's mountain parks——

Mr. Wallace: Don't you think that is extraneous matter?
Mr. Winsor: If the genial gentleman from Utah will bear with
me, I shall endeavor to show the connection. I desire to express my

appreciation of the opportunity afforded to view and enjoy the beautiful scenery of the territory surrounding the city of Denver. I am forced, however, in a spirit of frankness to say to Governor Adams and the other Coloradans who are disposed, and sincerely so, to boast of their mountain scenery, that they haven't seen anything As I stood yesterday afternoon at Lookout Mountain with something akin to awe looking out across a thousand towering peaks and admiring the beautiful valleys below, I was approached by a Californian, who said, "Pshaw, now over in California". Oh, well, I suppose there is no use bringing that up. Though out of my gratitude as a guest who has been extra well treated, I do want to warn Governor Adams that he had better look out. I observed Governor Young looking very speculatively at the grave of Buffalo Bill and I thought I saw a glint of covetousness in his eye. It is not my intention to suggest the enterprise by which Colorado became the custodian of that illustrious frontiersman's remains, but be that as it may, I suspect that Governor Young contemplates a new allocation, and if he does, I know just about what share he will propose for Colorade.

It was my fond hope yesterday when we accepted Governor Adam's kind invitation that we were going to be able for one afternoon to lay aside and forget the knotty questions we are here engaged in an attempt to solve. I did the best I could in that direction, and for a time it seemed that the effort might be successful, but as we left Lookout Mountain for the return to Denver and were driving down Bear Creek Canyon, lo and behold, we espied ahead of us an automobile bearing a most astounding number-26,555,420-I think it was. From what state of the American Union could an automobile come bearing a number so stupendous? Looking closely, one of my fellow excursionists exclaimed, "Why, that is a California car; but that is not a license number—it is the acre feet to be stored in Boulder Canyon reservoir."

Having thus established the connection between my preliminary remarks and the business of this conference, I wish in rebuttal to call attention to a few points which should be more emphatically pointed out. Governor Emerson has made me a bit uneasy by his insistence that much that has been said today is not proper rebuttal. I also wish to plead, as others have, that I am not a lawyer and am not always able to determine what is proper rebuttal and what is not, but I take it that you are here trying to ascertain the facts as we are trying to give them to you, and if you will be patient and not hold us down to the strict rules of procedure, we will do the very best we can to establish those facts, and I promise you that I shall be governed by the clock and conclude by noon.

I desire particularly to call attention to the fact that California's ratification of the Colorado River compact, being based upon the condition that twenty million acre feet of storage must be provided in the Boulder Canyon reservoir is no ratification at all. I am forced to take issue with one of my colleagues who said he thought Arizona and California were perhaps close together on items one and two of the Arizona proposal. Item one relates to the acceptance or unconditional ratification of the Colorado River compact, and on that point Arizona and California appear to me as far apart as the

ooles.

Governor Young, in his opening remarks, stated most emphatically that California would of necessity stand pat on the sort of ratification she has given to the compact. In defense of that position, he declared that the compact contemplated storage. Now, I think it is true that the compact did contemplate storage, but it did not contemplate that storage was to be predetermined, and that by a single party to the compact. Storage was one of the things, as there were a number of others, to be determined logically and in order after the one particular thing to which the compact related, to-wit: the division of water, was disposed of. Arizona is, and at all times has been willing and anxious to dispose of the matter to which the compact particularly relates, and then to take up in their proper and natural sequence those other matters which naturally must be determined. One of these is the question of storage. Certainly it was not contemplated by the compact that storage was to be predetermined; it was not contemplated by the compact that any particular dam site was to be predetermined; it was not contemplated that the questions arising out of the development of power were to be predetermined; it was not contemplated even that the allocation of water between the three lower states was to be predetermined, but I submit that California has approached this question with a so-called ratification of the compact, the result of which would be to predetermine all of these things.

Mr. Wilson (New Mexico): Is Arizona willing to make its ratification of the compact subject to an unqualified ratification by the legislature of California, assuming that we got all of you together on a Tri-State agreement and you all went back home, and the Arizona act was made subject to the unqualified ratification by California, so that when you do that you would be protected?

Mr. Winsor: Absolutely; if in that Tri-State compact all of these matters are agreed upon and determined, but we insist that no preliminary agreement by us at this or any time shall be made a part of an act of congress by means of which advantage shall be taken of us, until California has formally agreed with us on all of

these matters we are interested and concerned in

Governor Emerson: State what they are, briefly...

Mr. Winsor: Foremost is the question of the allocation of benefits to be derived from the development of power. It is one of the eight points which we have presented for your consideration. It has been said that we are not laying our cards on the table. That is not true. Everything we have in mind is embraced in these eight points. Let these matters be settled and we will ratify the compact and the Tri-State agreement subject to unconditional ratification by the California legislature.

Governor Emerson: In other words, you would not be willing if you could reach an agreement with California as to a division of the water in the river, to base your ratification of the Santa Fe compact upon that agreement, limiting it to a division of the water

only?

Mr. Winsor: No, oh no.

Governor Emerson: And you must have the power question

settled in your Tri-State compact?

Mr. Winsor: Certainly; all of those things must be determined which we consider vital to the interests of Arizona, and inasmuch as the compact contemplates that they are to be determined, we say that determination should be had prior to ratification. In further reply to Governor Emerson's question, I call attention to the fact that our point No. 8 would permit an agreement upon the water allocation and ratification of the compact conditioned upon no development being inaugurated until an agreement is effected covering these other matters the determination of which so vitally concerns us.

Mr. Mathews: How would that be covered?

Mr. Winsor: By a compact.

Governor Emerson: It would amount to the same thing then, would it not?

Mr: Yes; it would defer development until the questions had

been settled.

Mr. Wilson (New Mexico): Does not the compact provide a method of determining all matters that arise between the states? Would not Arizona be willing to submit these questions outside of a division of the water to that method of arbitration?

Mr. Winsor: That is what we propose.

Mr. Wilson (New Mexico): If you do that, would you not approve the compact without going into these other details?

Mr. Winsor: Yes; but we do not care to have the matters to be arbitrated—or rather, to be determined by the method provided in the compact—to be predetermined without any participation in the proceedings by us, any more than we want the allocation of water to be predetermined.

Mr. Chairman, what I now have to say may be criticised on the ground that one should not speak ill of the dead, but I wish to refer briefly to the suggestion offered by California early in this conference for the setting up of some sort of an arbitration board, or board of engineering investigation. That proposition is untimely of course, and naturally has not been taken seriously, but aside from its untimeliness and subject to modifications, it is not wholly without merit. Indeed, I should like to call your attention to the fact that from the beginning of the discussion of the Colorado river development, Arizona has pleaded with the federal government and with the congress of the United States, and it has employed to such extent as it was able, the funds of the state of Arizona to ascertain the engineering facts with respect to the Colorado river in our state—facts, which if they had been ascertained would probably have precluded the necessity for this conference. Arizona appropriated a considerable sum of money—and it is an item of my legislative record of which I am proud that I was instrumental in securing that appropriation-to be expended in co-operation with the federal government on surveys along the Colorado river in Arizona. money was expended, I think, to good advantage, and the results were distinctly valuable, but the amount available was wholly insufficient. Outside of that meagre amount practically all of the money expended by the federal government for specific and definite investigation of the lower reaches of the river has been expended, frankly, with the sole purpose in view of acquiring information for use in solving the problems of the Imperial Valley only. attention has been given to solving the problems of the remainder of the Colorado River basin-or rather, in solving the problems of the Colorado River basin at all, for as you all know, Imperial Valley is not in the Colorado River basin. Little attention has been accorded to the formulation of definite and comprehensive plans for the river's complete development and the utilization of all of its vast resources. It is well known that the data that was chiefly drawn upon in formulating the Colorado River compact—the so-called Fall-Davis report—and which has frequently been quoted in this conference, came from investigations which were authorized and were frankly designed for no purpose save the solving of the problems of Imperial Valley. We desire the problems of the Imperial Valley solved; we are not complaining about that, but we want the problems of Arizona and of the entire Colorado River basin solved alsonot merely those of the Imperial Valley-and if the latter are to be solved first, we want to know that they are being solved in a manner not out of harmony with a sane, comprehensive plan of solving all of the basin's problems, and particularly, of course, our own. Now, if development which we feel may not be in harmony with a comprehensive plan of solving the problems others of us have, and which, at any rate, would predetermine without our consent and without taking our interests and rights into account the questions in which we are vitally concerned, may be laid aside and delayed, pending such an investigation as our California friends propose, and such as we have frequently asked the federal government to make, Arizona will be glad to join in the movement. We will be glad to go any route to secure beyond peradventure the facts upon which to

base a comprehensive development. However, when I asked Mr. Mathews, or possibly it was Governor Young, if it were California's intention pending the completion of the investigation suggested-which we know would take a long time and require a lot of money, the source of which has not been disclosed-to defer the proposed development, he quickly replied, "No." That, of course, makes the proposal an impossible one. If the bill which is pending in congress should pass that body and run the gauntlet of the courts, there would then be no occasion for an engineering investigation. All we hope for, or expect to get, would have been disposed of and the findings and conclusions of the unique court of engineers suggested by California would, even though they should be acceptable to our legislature, be of small avail The barn in which our rights are stabled might finally be closed, but the horse would already have been stolen. If agreement can be had that legislation and development shall remain in status quo, we will agree to join in any sort of engineering investigationwe will contribute according to our ability to such an investigation, but without an agreement of that character, we decline to take California's suggestion any more seriously than you have.

If the pending legislation cannot be laid aside; if our California friends insist it must proceed without regard for the investigation they have themselves proposed, then I assert that our statements as to our requirements and our representations as to Arizona's ability to utilize the waters of the Colorado river, offered at this time, are entitled to just as much respect and consideration as the claims and representations of the Californians. We assert that we are able to utilize practically, economically and to the greatest benefit of the people of this country, the water we are asking for—half of the ain stream of the Colorado river in our state—and until proven otherwise, we ask you to believe that it can be done. Any legitimate

attempt to prove otherwise we will gladly join in.

Next, let us discuss in more detail the proposition of arriving

at a fair division of the waters of the Colorado. Our California riends have advanced the principle of first taking out perfected rights before attempting a division. It is natural that they should do that, because having gained an earlier start than we, of course they have the lion's share of perfected rights. I shall not give much time to a discussion of perfected rights, and certainly shall not quibble over them, for we utterly reject the principle and submit that for the purposes of a fair division of the waters of the Colorado river between Arizona and California, the question of perfected rights beyond the fact that whatever they may be, they must be recognized, has no place in this discussion. I might, however, say, in passing, that the representations which the Californians make as to perfected rights, is obviously a California set-up. In substantiation of this I will suggest that there has not been taken into account the perfected rights for Yuma project which should be placed in the Arizona column. Yesterday I started to question Mr. Dowd regarding a contract entered into in 1918 between Imperial Irrigation district and the secretary of the interior, and Mr. Wallace thought that the point I wished to make should be brought out in rebuttal rather than at that time. Since we are now engaged in rebuttal, I wish to place the matter before you.

The contract to which I refer is one giving to the Imperial Irrigation district the right to connect its irrigation system with Laguna dam, and to divert the water for Imperial Valley there. Laguna dam was built for the Yuma project, for which project water is diverted at that point. I read one paragraph of the con-

tract:

"It is understood and agreed that the Secretary of the Interior shall control the division of the water and shall divert for the use of the Yuma project, or any auxiliary projects constructed thereto as heretofore or hereafter contemplated, within the United States, but not to exceed 120,000 acres, a sufficient amount of water to

secure the permanent and economical reclamation thereof."

If this is not a guarantee of sufficient water for the Yuma project up to 120,000 acres, then I fail to grasp the meaning of English words. I anticipate what my California friends will say—that not all of that land has been placed under cultivation, and if we are going to include in our perfected rights certain lands not yet under cultivation, they will claim the same right for Imperial Valley. I have no objection to doing that, for the next clause in the contract provides as follows:

"Not to exceed, however, one-fourth of the water in the river

above Laguna dam."

This, then, is the formula—one acre foot of water for Yuma

project and three for Imperial valley—120,000 acres for Yuma project, and 360,000 acres for Imperial Irrigation district. That is a valid and binding contract—certainly as between Imperial Irrigation district and the Yuma project, the latter being represented in the person of the secretary of the interior. I am not a lawyer, but I venture, as a legal proposition, that the Yuma project has a right to water for 120,000 acres of land, only a portion of which has been taken into account in California's set-up of perfected rights. If it were not true that this contract constitutes a perfected right, and a definite allocation of water should be made to Arizona, and Arizona should exhaust that allocation elsewhere, does it not follow that the Yuma project would be deprived of water for the reclamation of its ultimate acreage in spite of the guarantee embodied in the contract which I have quoted?

This is all I care to say about perfected rights. As a means of arriving at a fair division of the waters of the river, it is beside the question. It is something which should not have been dragged in. I know of course, who dragged it in, but I do not know who left the door open. The Colorado River compact which we may reasonably assume is the correct model for the formulation of the supplemental compact, does not deal with perfected rights further than to declare that they shall be taken care of outside of the allocations to the respective basins in which they exist. That is the proper course to pursue as between California and Arizona. Out of the waters allocated to them, each can take care of their perfected rights and must necessarily do so since vested interests may not be destroyed.

It was not the purpose of the Colorado River compact, I am quite certain, to penalize a state because it is young; because it does not possess great wealth and political influence, or because although it possesses tremendous natural resources it has not been in a position in the past to develop as rapidly as some other state. If that were the theory of the compact, there would be no compact in which to embody any sort of a theory, for it was designed and constructed upon the principle of protecting the slowly developing states of the northern basin. If perfected rights were the measure of the division, the upper states would not be in the picture. It was to shield you against the peril of rights already perfected and rights which might hereafter be perfected in the lower basin that the compact was brought into existence. California was admitted into the Union in 1850—

Governor Emerson: It seems to me you need a compact with California for the same reason that we needed one between the upper and lower basins.

Mr. Winsor: Exactly, Governor, you are right as usual; and

just as you need its ratification if you are to be protected before large development occurs in the Lower Basin, so do we. California was admitted into the Union in 1850. Arizona scraped in by the skin of her teeth in 1912. California got sixty-two years the start of us. During all that time she was developing, building, growing in population and wealth; achieving great things perfecting her famous climate; and spreading the gospel of California in every land. With the wealth which flowed toward her she reclaimed large areas of land to feed her increasing population, and it is not surprising that although the Colorado was not a California river, she called upon it to supply her demand for water, thereby securing what she now sets up as her perfected and preferred right. Arizona could not do the same thing. She was not in a position which enabled her to do so. Arizona was a wild and little known territory. That does not signify that we have not the opportunities, nor does it mean that we do not now need the realization of those opportunities just as much as California once did. While California was taking gold out of her gulches, washing it out of her streams, and extracting it from credulous easterners, Arizona was busy making the world safe from the Apaches. Now, we ask that we be not deprived of our opportunity.

We do not want, and we do not expect to be penalized simply because we did not arrive as early as California. We are not asking for a chance to catch up with our sister state agriculturally. That will never be possible, for we have not the water resources, whatever sort of a division may be made of the waters of the Colorado, but to the extent of such resources as we have, we want a sort of an even break. Probably the factor which should most be taken into account in the division of water and the drafting of an agreement, is the one suggested yesterday both by Governor Emerson and Mr. Wallace—regard for the sovereign rights of a state and for its future

Certainly, there should be taken into account as an important factor, opportunity for the use of the water to be divided. Again I assert that we are able to use all of the water we have asked for and a great deal more. Permit me to tell you something about the land of southwestern Arizona, upon which this water will be applied. It is the land embraced in the project Mr. Maddock has directed your attention to on the map. It is wonderful land. At the risk of being charged with sacrilege, I say to you, that there is nothing like it in the great State of California—nothing that will produce the same quality of citrus fruit—nothing that will produce the same quality of grapes or figs, or that will produce them so early. On this land products in an amazing variety may be grown when they cannot be

welfare. We appeal to that principle.

grown elsewhere in the United States. I make one exception—the Coachella Valley, in the northwestern portion of the Salton Basin, possesses land for productivity and earliness, comparable to our own; but it is going to cost a lot of money to carry Colorado River water through the All-American Canal to that little valley. southwestern Arizona land will stand a high cost for water. On some of it, known as the Yuma Mesa, we are now paying the Government \$200.00 per acre to put water on it. That is much more than we should be paying but the land will stand it. We are not only paying that high cost for construction, but we are paying it in ten years together with six per cent interest. This is away above the cost of the project Mr. Maddock has described, and away above the cost of any of the projects by means of which we propose to put Colorado River water on to our land. The point I make is, that our land is of a character which will stand a high cost of development and still bring it within the bounds of possibility.

I wish to refer very briefly to the California proposal which would limit Arizona to twenty years in which to use the water alloted to her. I do not take that proposal seriously. You do not take it seriously. Frankly, I do not think our California friends intended it seriously. They are shrewd dealers and they inserted that provision merely for the purpose of taking it out. Before the conference is ended they will withdraw it gracefully, hoping to re-

ceive much credit for a magnanimous act.

All we ask, gentlemen, is a real honest-to-goodness fifty-rifty deal-not a camouflaged one, but one that will stand analysis. Such a proposition we will accept without a moment's hesitation. I trust that our California friends will not continue to point to their agreement to give Arizona her tributaries as an evidence of their generosity. Ĭ say to them,—you are not giving Arizona her tributaries; you are giving us nothing; they are our tributaries and we propose to retain them. We are not asking for the water of California True, California streams do not flow into the Colorado as ours do, but that is a mere chance of topography. If they did flow into the Colorado, California would not permit of surrendering any portion of them that she could utilize, and we would not be so presumptuous as to suggest it. California has 72,000,000 acre feet of water in her streams. Arizona at best has but a fraction of that amount. Well and good. It is as nature decreed. To California what the creator blessed her with, and to Arizona what He bestowed upon us. To such an extent as we can make use of our resources we want to do so and we expect to do so. We ask nothing from California which is hers and California is giving up nothing. All we ask for, gentlemen, is a square deal-all we seek is fair play and the application of that Golden Rule from on high which for two thousand years has blessed and ennobled mankind, "As ye would that others

should do unto you, do ye also unto them likewise."

Governor Emerson: When I came into this conference, I was very hopeful that we could agree on the solution of this question of a division of the water between the states, the question to which the Santa Fe Compact primarily devoted itself. It seems to me that it would be a real accomplishment if the seven states could conclude this agreement. Then we would be in a position to take some action on the Mexican question. I was, therefore, hopeful that we could lay other matters aside and apply ourselves primarily to the question of a division of the water. I do not want to see any special project attached to this like the tail of a kite, such as a revenue from power. Don't you think it is possible that if the lower basin states could agree as to a division of the water between them. that then each one could unqualifiedly ratify the Santa Fe Compact and get that far towards a solution of the Colorado River problem. get ourselves in a position to deal favorably with Mexico and favorably to our united interests, and then let the other questions take their course after this matter of the division of the water has been settled, but not attach a proviso that seems to me is going to make the question too long drawn out to serve the purposes in the way it should be served at this time.

Mr. Winsor: Governor, as I explained the other day, I was originally an ardent advocate of the unconditional ratification of the Colorado River Compact. I am not ashamed of that. I had all the ambition that you have for a settlement of the matters contained in that Compact without tying any extraneous matters on to it as a tail is attached to a kite, to use your happy phrase. For a good while I vigorously denied the charge that was set up by opponents of the Compact, that extraneous matters were being tied to it like the tail of a kite but finally was forced to believe, when California insisted upon tying the Swing-Johnson Bill and the Boulder Canyon Dam to it, that there was a very definite tail to the kite. Dull as my comprehension was, I could not keep from seeing what was being done. Our people were not blind and they saw it also. Arizona has not tied these things on to the Compact—not a single thing—it was our California friends who did that. Observing the peril they are putting us in, and their insistence upon predetermining without reference to any Compact many matters in which we are vitally concerned, and notably, the construction of a dam partly within our state, without our consent—we have no choice but to vigorously protest. Under the circumstances, we know of no better course to pursue than to follow the example set by the Upper Basin States

and to insist upon the settlement of these vital questions as a con-

dition precedent to any development.

Governor Emerson: In drawing the Santa Fe Compact we studiously avoided trying to settle where that project should be; we tried to avoid the questions of revenue from power, believing you could not reach an agreement on a division of the water otherwise. I believe if you are going to have an agreement on a division of water, we will have to do the same thing today, but it seems to me that there is so much to be accomplished that both states should be willing to consider without reservation, the question of a division of the water and allow them to ratify the Compact.

Mr. Winsor: I am in sympathy with your argument; let us ask the offender to obviate the difficulty—to remove the tail to the kite.

Governor Emerson: If the so-called offender would remove that difficulty, would Arizona be willing to let the consideration of power and other matters go?

Mr. Winsor: Yes; if the construction of projects in the river

can be deferred until our rights are determined.

Governor Emerson: I think that is fair enough.

ADDRESS IN REBUTTAL BY THOMAS MADDOCK,

Member Colorado River Commission for Arizona, at Seven States Conference in Denver, August 25, 1927

I want to go over some of the testimony that was introduced by California and explain, if I can and may, some of the exceptions that they took to our remarks. Mr. Childers read, in starting his testimony, from a report of Dr. Ransome, a geologist. That report he read from is several years old, and refers to some rock about four and one-half miles above Lee's Ferry. The report I was speaking about the other day from Dr. Ransome is one made quite recently and refers to a condition about four and one-half miles below Lee's Ferry. Geologically, the difference in elevation of the two 10cks would be over one thousand feet. So you can see it is not the same thing at all. We will be glad to furnish a copy of Dr. Ransome's latest report to the California delegation and clear up that

Mr. Childers brought out the fact that California felt kindly topoint. ward the State of Arizona. We believe that. Our people go over there and they come over to our state. Most of us came from back East and just happened to locate in different states. I do not think, though, that his illustration was as fortunate as he might have secured from the numerous things that California has done to us and for us. He stated they had voted for the San Carlos Dam. We appreciate that, of course, but it is hard for us to separate their interest in that matter from our interest in the matter, because that appropriation was made with the idea of stopping the Gila floods. It was a Gila flood in 1905, and not one from the Colorado, that entered the Imperial Valley. So we think there might have been a little of self interest behind that vote, rather than the love we know that they bear toward us.

They speak of California's interest in the Gila. It is true that the Gila enters the Colorado river above the Hanlon heading. It is true that they now use or can use some of the water of the Gila. Therefore, right now they might have an interest and their development under the law of prior appropriation of such water might take preference over some of our land so far as the Gila is concerned. But here is the situation; they are now paying the Federal government to transfer their intake from the Hanlon heading to the Laguna Dam. When they have done that, the intake will be above the confluence of the Gila with the Colorado river, so that they are abandoning all interest in the Gila. It is particularly fortunate that we can point out to you that Mr. Childers himself, in his testimony before the delegation in Congress, stated that they did not want the Gila water.

The statement was made in starting the talk on land, that a survey had been made of the lands in California and in Arizona. Now, I understand the legal profession rather resents the use of legal terms by laymen. They want to reserve that wonderful vocabulary of theirs to themselves. You know, I rather resent this word "survey," as it has come to be used lately. Their survey was merely a superficial guess. They did not come over into our State and run any lines. It was simply a compilation by Mr. J. B. Lippincott, the well known California engineer. It is a guess. I say that a survey from an engineering standpoint is a survey. If you make an estimate by looking at the ground, you should call it that. I want you to know that the figures given you by California here today represent the layman's idea of a survey and not the engineer's idea.

Mr. Childers was worrying about the fact that if Arizona was not limited to twenty years to put her share of the river to beneficial use, that the water we would not use would go down to Mexico. That worry would be justified if it covered a little more territory. What is going to happen to the water that the Upper Basin does not use in the next 150 years? What is going to happen to the water, the enormous amount of water, the City of Los Angeles has requested between the time she is the size she is at present and the time when she secures the enormous growth that will be necessary before she

can use that amount of water? If we are going to worry about the water Arizona is not using, we should worry about the other two items also. There should be no limitation placed on Arizona unless there is a limit on the other states. I have not had an opportunity to consult the other members of our Commission and it is hard to speak for a state. A man can hardly talk for himself, especially if he is married. But I believe Arizona is perfectly willing to take any limitation on growth that the Upper Basin States will take. the Upper Basin States say, "We will take what we want for twenty years or not take it,"Arizona will do the same thing. I feel in this whole thing like a youngster I remember reading about, I think in the third reader. It was a poem where the little girl always came back to the fact that "We are seven," in the description of her family. All we want is just the same consideration that you get. We will accept that 20 year proposition if you all will accept it. But we request that you do not ask us to take anything that you are not willing to accept yourselves.

The statement has been made that if a great dam is constructed, and an All-American Canal built, that the Republic of Mexico is helpless. I would like to believe that, but it is not true. As long as Mexico has in her possession a river that just a few sticks of dynamite would turn on to and submerge an area in the United States, she must be considered, because any dam, however large, would merely stop the flood for a while. You cannot store Colorado river water indefinitely. Mexico has one possible agency therefore that gives her a veto. She must be considered, or like Samson, dying herself, she can pull down the pillars and destroy the irrigated areas that exist in these United States also. If we are to control Mexico we will have to revert to the same method we used in 1845... The Boulder Dam and All-American Canal will not do so.

The statement was made that California has in that wonderful state four times the amount of water that all six of the other states have in their whole drainage area. Mr. Childers admitted that. It is obvious. But he also says that they have some areas in that state that do not have sufficient water. We know that. But we cannot figure why every acre in California must no longer be desert. We cannot figure why all the desert must come to the other six states, and that the state which possesses four times as much water as the rest combined should also take enough so that no portion of her area shall be desert. I cannot understand that.

Mr. Childers stated that the Imperial Valley irrigation district is going to pay the cost of the All-American Canal. I do not know, they may have made later arrangements. If they have not, I refer you to the letter of the Secretary of the Interior, dated January 18, 1926.

It shows plainly that the All-American Canal pays less than two percent of the cost of the \$125,000,000 project yet it costs thirty percent of that expenditure, the remaining twenty-eight per cent of the cost of the entire project must be borne by the power users.

I would like also, if I might, cover some of the remarks of my fellow engineer, Mr. Dowd. I want to compliment him on his speech as it is hard for engineers to stand up before a group of men and talk. They have practically no experience along that line. They are meeting machinery and mules, and things like that, and it is hard for them, with so little experience, to meet the clever minds that are educated in the environs of the court room. I want to compliment him on the way he handled the situation. Some of the things he said, I think, may need a little further explanation. He rather resented our map over there on the wall. I can understand his resentment, as it does look like the portion of Arizona drained by the river is larger than the drainage area of the stream in California. That is not our map; just the coloring is ours. The map is put out by the United States government. The lines of the limits of the Basin were laid down by the Government. Frankly, the Imperial Valley lays in the Basin, not of the Colorado River, but of the Pacific Ocean. They have done well to keep the ocean out. It is a basin just like the Great Salt Lake Basin. It is not a part of the Colorado River system. But you can add it onto the map, and still the amount of the goldenhue will not be so great as to dazzle the eye in comparison with. the blue of Arizona.

Mr. Dowd brought up something that I believe is a correct statement—that the fear of silt filling the Boulder Canyon Dam is newspaper talk and absolutely ridiculous. I think he is right. He gave as his reason that the numerous dams that would be installed for the use of water in the Upper Basin would restrain those floods, and there would not be the quantity of silt carried down as now. As the silt would not come in, the Boulder Canyon Dam would have little or no possibility of ever filling with silt.

The only thing I cannot understand is why he did not extend that same line of reasoning to the dam we suggested day before yesterday. That dam is located above the Virgin. It is located above the Little Colorado. That means that they will not be running into the Marble Canyon Dam with their silt. Yet I think Mr. Dowd overlooked this idea when he stated that our suggestion for an eleven million acre feet reservoir was not feasible because

of the silt.

You will note in the California figures, (they have given good reasons for it and I think they are logical) their set-up gives the Arizona acre 3.0 feet and the California acre, 4.2 feet of water. I

think that is correct, or very near correct. But what I want to point out to you is this: That simply means that it costs forty per cent more water to irrigate the average California acre than it does to irrigate the average Arizona acre. If we look at this proposition in the broad light of benefit to a nation, more land can be irrigated by accepting the suggestion of Arizona than by accepting the pro-

posal of California.

Mr. Dowd suggested that the areas shown on our map were not net areas, but that they were gross areas. I presume he must have overlooked my statement the other day. I told you that the area was secured by imposing a soil survey upon a contour map. If you will notice the map closely you will find in between those solid colors many places that are still white. That means rocky soil, alkali soil, and rough ground not susceptible to irrigation. The colored area there is net acreage, with this exception we have not taken out the roads, or the cities, or the buildings, because they do not exist there as yet. They are going to exist, however. There will be a number of beautiful cities to be built, and naturally they will have to come out of that area. But they will have to have an equal amount of water for the population of those communities.

Mr. Dowd made the statement that there was no water, or rather an insignificant amount, in the Arizona tributaries. That is a very natural opinion and I do not blame him for it. A great many men in the United States had it; a great many men in the United States still have it. For about ten years of my life I lived in Northern Arizona. I know Arizona tributary water runs into the Colorado River, because I have seen it. I have here a copy of some figures that have been obtained of measurements at Lee's Ferry, Glenn Canyon, Topock and Yuma. For various years they have been kept in conjunction with the United States. These figures show that between Lee's Ferry and Topock there is an average increase in the river of 1,650,000 feet. You will find that same figure, or practically the same in Mr. LaRue's report. I have a table here that goes a little beyond his report, as it takes in 19225 and 1926. It is a later Government record.

This distance is about 490 miles. That means that regardless of evaporation going on constantly between Lee's Ferry and Topock there is an increase there of one and two-thirds million acre feet.

It is only 200 miles from there on down the river to where we have the other measurements at Yuma. We find at Yuma there is a loss in that 200 miles of about 1,400,000 acre feet. Now, here is the situation. You must admit that there is some water that comes in below Topock. One year it showed an increase of 1,100,000 acre feet going in between those points. But on an average there is a loss, because the increase in the river is overcome by evaporation. So I say that we have in the upper region, the region above the Gila, a region greater in area than the Colorado River Basin in any other State, a contribution that is at least two and one-half million acre feet, and which I honestly believe is three million or more acre feet. That is not an insignificant factor. The one million six hundred thousand acre feet we know of for sure, is not an insignificant factor.

Here is one of the tables they kindly furnished us, comparing the demands of California and Arizona. Those demands are not our demands. Here is another case where I do not like the word "used." It may be a comparison of their ideas. But it is not our explanation, nor do we subscribe to the idea that that constitutes our demands. This is a clever document, a very clever document. It shows the gravity land in each state and compares them for your benefit.

How do they mean "gravity?" Where from? Why, don't you know if it was ready for irrigation we could put half of Arizona under gravity if we started up the river a little farther? It is just a matter of where you are going to start, when you say how much is susceptible to gravity irrigation. There are three or four, maybe five million acres in Arizona that are susceptible to gravity irrigation by taking out the water at Lee's Ferry at elevation 3,500 feet. So you can see that when you talk about gravity, it does not mean anything unless you tell where you are going to start. Suppose instead of figuring on the Laguna Dam at an elevation of 151 feet above sea level they had said, "We will take out the water at Hanlon's heading where we now take our water." Then they could have made even a better statement for you, and they could have shown that we could not irrigate any land at all in Arizona by gravity. Just go down the river far enough and we cannot use any. So that table does not show our demand. While I think it is clever, I hardly think it is a fair presentation of facts.

You see that area we talk about pumping water onto? All that area can be irrigated by gravity from the Boulder dam. The highest contour is 600 feet above sea level. That is about the elevation of the Boulder Canyon reservoir. We suggested the pumping proposition because it is the cheaper. But when necessary we can put water on

our land by gravity.

I want to go into a matter of law. I do not pretend to know anything about the law. But it strikes me that the idea of law is common sense. We have a Federal constitution. When the States created the Federal Government, they said that the Federal Government should have charge of the national defense. We all know that is necessary. Yet those states, when they gave that provision to

Congress and the Government, said that the Federal Government could not come into a state and condemn land for docks, arsenals, or fortifications, without the consent of the Legislature of the State. Now, we specifically gave the power of national defense to the Federal Government, yet we put in a restraining clause on their power in that regard. In the matter of water, and so forth, the states never gave the nation any authority. Every bill I have seen, including the Reclamation Act, and the Federal Power Act, specifically states that the Federal Government must obtain the consent of the State before entering upon any construction. If the Federal Government must get the consent of the State, it seems to me obvious ernment must get the consent of the State, it seems to me obvious that a State, which has less authority than the Federal Government, could not go into an adjoining State. That seems to me to be common sense.

California has exhausted all of her present ability to take water out of the Colorado River. They cannot take water for the City of Los Angeles without encroaching upon the present supply of the Imperial Valley. They cannot make another move down there, if Imperial Valley. They cannot make another move down there, if there is any such thing as state sovereignty, or state consent that may be given, or may be denied. If they could go ahead and take water under the law of prior appropriation, we could not stop them. They could go right ahead and take it. But that is not the case. They are asking to come into our state and the adjoining state of Nevada to secure our resources in order to get more water. Their water rights come from the state and it don't make any difference how much the people file on or appropriate, or how much they hope to get, if the sovereign State of California cannot deliver it to them, they do not get it.

I believe that either California or Arizona could take all the water allocated to the Lower Basin; not just yet, but they could take it all some day and use it. Further, I believe the Republic of Mexico could take nearly all of that water especially when you take into consideration the ability to pump. The estimate on Mexican gravity land, I believe, runs between 1,300,000 and 1,500,000 acres. Taking into consideration the pumping, they probably could take the rest of the river. It is just a question of who is going to go without. As I say, California has taken everything she can of her own resources, and the only water that is going to be available comes from our resources. What is happening here is not that California offers' something to Arizona; but the question is, how much, out of her generosity will Arizona give to California. And I think this question ought to be looked at along that line.

I must insist on taking another exception. I believe it was Mr. Childers who stated that the pumping cost over the mountains to the

City of Los Angeles was estimated at \$42, in rebutting my figure of \$22. I do not want to take a direct issue, and I would not take direct issue, with a man like Mr. Childers if I did not have some California support, if a man in California had not shown me that he was wrong. Mr. Mulholland, on page 113, Senate Document No. 320, states that it will cost five cents per hundred feet; there are 43,560 feet in one acre foot; multiply that by five cents per hundred feet and you get \$21.78 instead of \$42.00, as suggested by Mr. Childers.

In addition; a controversy has raged for some time between Mr. LaRue and Mr. Mulholland in regard to the cost of pumping, because Mr. LaRue suggested a gravity plant, for Los Angeles by going up the river a little further. This controversy brought out estimates of \$14 to \$17 per acre foot for pumping the water to Los Angeles.

Arizona has been criticized and condemned, for the boldness of our ideas; for the idea of the High Line Canal and the Long Tunnel Plan. That is why we tried to bring in a plan, not as the only one, but as suggesting something small and easily understood that would show, that without any of these grand ideas, we could put the amount of water we are asking to use in Arizona.

With equal money for what Los Angeles has estimated they can take the water to Los Angeles 1500 feet over the hill, based on Moffatt tunnel prices, we can take three times that much water down to Phoenix by a long tunnel and irrigate as much of three or four million acres of land as the water would cover. At the same price Los Angeles is figuring on, we can put three times as much water

onto one of our great valleys.

I want to apologize for one oversight or misstatement I made. The Governor of California caught me. I stated that Arizona was perfectly willing to give California all the drinking water she wanted. In view of the little piece in the paper this morning containing the Governor of California's remarks on grape culture, I presume he figured that was an insignificant amount of water. I really apologize for that. I did not mean drinking water. That is a mistake of a novice or amateur speaker. I mean that Arizona is willing to grant domestic water for her cities. I was not quibbling and do not intend to do so. But their domestic use must be based on a reasonable population and a reasonable growth and demand.

I would like to point out another thing in the Governor of California's statement. I think some of you believe that Arizona is to be awarded her tributaries. That is not correct. In the Governor's statement he specifically says that these tributaries are ours only before they get into the main stream and after that, following their suggestion for dividing the river two-thirds and one-third, California would be demanding two-thirds of our tributary waters as well as

two-thirds of the water coming down from the upper basin.

Exception was made to the statement I made, that while I did not believe it, testimony showed that the evaporation of Salton Sea was eleven feet. I tried to say very plainly that I thought that figure was too high. I really do not know, but I want to say that if you will turn to page 58, Document 320, you will find an estimate by one man who lives there at seventeen feet; on page 55 of that same document there is an estimate made by an engineer in that region of eleven feet. Anyway, I do know this, and I will stand for this: There is going to be more evaporation in the Boulder Canyon region than away up in the higher altitudes and higher latitude of Glenn

Canyon.

I want to show what in our opinion the Arizona proposition means to California, what we have offered them. We have offered them everything they have really been asking for and pleading for. We have offered them drouth control; we have offered them silt control; we have offered them flood control by the use of our reservoir. Our propositoin would do more. The Geological Survey last spring made an estimate that there would arrive at the Laguna Dam 9,385,000 acre feet per year after the needs of the Upper Basin were completely satisfied. If we deduct the 300,000 acre feet, being the amount Nevada has heretofore requested, we have 9,085,000 acre feet left. If a reasonable amount of water is given to Arizona, we are going to have a return flow estimated at 500,000 acre feet. Mexico today is using less than 1,000,000 acre feet. If we are going to supply half of that from the return flow, we only need to take 500,000 acre feet out of the other supply of the main river in order to give Mexico everything that the United States should give to her. That would leave us 8,585,000 acre feet to divide between these two states. Fifty per cent of that is 4,292,500 acre feet. I am not going to go into the demands of Los Angeles. I cannot rebut it as California has not put it in. But 600,000 acre feet instead of 1,095,-000 acre feet added to the water now in use and available from the sources close to which they now get water, (and I might say according to the report of the California Water Commission, those sources show nearly five times as much water as they are using now,) would supply Los Angeles with domestic water and drinking water for a population of 10,000,000 people. That is a big city.

If we take that from the California share of 4,292,500, we would have 3,692,000 acre feet left. Appendix B, Bulletin No. 6 of the Department of Public Works of the State of California, says they are gonig to need in the Imperial Valley feet of water per acre. That checks Mr. Dowd very closely as he gave us the figure of 3.0. Also allowing the same figure for losses, we would need four feet at the canal heading. Four feet going into 3,692,000 acre feet would give you a possibility of irrigating in California 923,000 acres. The statement yesterday was made that the Imperial Valley irrigates 370,000 acres; Yuma, California side, 15,000; Palo Verde 36,000, or a total of 421,000 acres. Or in other words, the Arizona proposal, besides taking care of her cities, gives her drouth and flood control and silt elimination, and would give to the State of California an opportunity to bring in 500,000 additional acres of land, which is bigger than any irrigation project existing anywhere within the United States.

We also want a future. California has suggested nothing for Arizona. The bill they tried to jam through Congress without debate, by gag rule, is intended to benefit California alone.

Today they have exhausted their own resources. They are absolutely stopped and have nothing to look forward to if limited to their own resources. But Arizona offers more than double the amount of acreage they are now watering, and water for their cities by permitting them to use of our stored water. As I stated, the pumping project shown on that map is only a suggestion. We can put water there by gravity in many ways. What we suggest is a copper conduit, not a long tunnel right now, nor an expensive ditch. We can drop the water over a power dam, let the water run down the stream, transmit the energy, and reuniting the two again below, we can lift the water on to that great area of fertile land. This is practicable.

The cost is very little. It is insignificant when compared to the cost of irrigating projects now under cultivation in California. This plan will permit us to bring in land gradually. It will avoid competition among the states, which would put too much land under water at one time. California admits that water for a million acres in California is not now being used because of lack of demand for farm produce. I am not offering a pumping project as the only solution. I know you hesitate at a 450 foot lift. It don't mean that. The average is 250 feet for 1,400,000 acres. The first acreage to be cultivated would have a much smaller lift. All of it averages about one-sixth the lift Los Angeles proposes to pump water. I insist that California expects to irrigate the coastal plain with Colorado river water. Their reports say so.

Their estimated costs of pumping water to Los Angeles are less than the present cost of water on many of their irrigation projects. Remember, they are figuring on very cheap power. Where else would they use the water they are demanding? Certainly not in the Imperial Valley.

Mr. Mead, a Californian, says 250,000 more acres are irrigable

in the Imperial Valley. Mr. Davis said 280,000. Meade put the total of the Imperial Valley at 650,000 and Mr. Davis at 680,000 acres; but California has asked for water for about a million acres. With a \$30,000,000 subsidy like the All-American Canal proposal we can

irrigate 500,000 acres in Arizona by pumping.

California righteously is looking ahead. They have a report here with which the wildest idea of an Arizona High Line Canal does not begin to compare. This report deals with taking water out of the Sacramento River and pumping it back up into the San Joaquin Valley. The estimated cost is about \$300,000,000. The engineers report it will cost \$13.70 per acre foot to deliver that water from the Sacramento to the San Joaquin, or more than the cost of irrigating that million four hundred thousand acres in Arizona. I believe they are going to do it. This is not the dream of one man, the State Engineer.

You will find this report has been signed by some of the best

engineers in the world.

That is what California is looking forward to.

We admit such plans are visionary. But we need vision, because "without vision the people perish."

California is looking ahead. We admire her for it, and desire

but to imitate her.

The Santa Fe Compact would have given, or permitted, California to take 86 per cent of the water going to the Lower Basin, by

the law of prior appropriation.

I know that the Upper Basin States resented the fact that, after sitting together with you up there at Sana Fe, we did not sign that document. We were the only ones hurt in that document. Naturally, we objected to it. Do you know when that document was signed, and you offered the Lower Basin seven and one half million acre feet of water, there were appropriations on file in the State of California that they had been pursuing with reasonable diligence, which would have taken more than all of the Lower Basin allotment?

The Imperial Valley appropriations were 7,300,000 acre feet. If you add this to the Palo Verde and other projects, and admit that California has the wealth and population to go ahead with diligence, Arizona, under an unamended Santa Fe Compact, would have received water for but a few small projects along the river, including the

Indian Reservations.

Do you wonder that we did not sign?

Our Governor asked California for a conference, but for two years they said "No."

Finally they came over and asked for three-fourths of the

river. In later negotiations they said they would take seventy per cent and give Arizona thirty per cent; then they offered sixty-eight to thirty two. Then, at the suggestion of Nevada, they agreed to limit their demands to two thirds for California to one-third for Arizona, after Nevada had agreed to give up 100,000 out of her 300,000 acre feet. Now today they demand about sixty-four per cent. They are calling it a fifty-fifty proposition.

Their 50-50 proposition is like the 50 per cent rabbit sandwiches,

which were made out of one horse and one rabbit.

You want to know why Arizona stands steadfast. We have not been dickering or trading in this matter. We put up a proposition that we thought was fair, just and right. It was something our people could understand, that any man can understand, a fifty-fifty proposition. We thought we could get our people to accept it, despite the fact that that map of areas makes it hard for our people to accept a fifty-fifty proposition.

Arizona denies suggesting that California destroy citrus crops in order to give domestic water to Los Angeles. There is no necessity for that. That is a good oratory, but unfair. What we say is that an acre in California that never has had any water must contribute to Los Angeles' domestic use, if necessary, rather than that an acre in Arizona that never had any water must make that contribution.

If they would rather drink their water—if they got into the habit of drinking water—than use it for irrigation, all right. But the subtraction should come from them rather than from us.

Our State has been placed in an unfortunate position. We have

been beating back trying to get in touch with the world.

California is a wonderful state. It is the best advertised state in the world. Their Chamber of Commerce is the most wonderful organization of its kind in the world. They call Arizona their back country.

But they put out propaganda that we were "Dogs in the manger." They beat us to the punch. We have been staggering along ever since.

Look at that map. I do not think it is right for Arizona to offer California fifty per cent of the water in the main stream. Frankly, if we were starting on an equal footing I assure you that personally I would never agree to that. But we were starting from behind. Public opinion was against us, and we had to offer something more than fair, lest public opinion and an indignant nation take everything from us. We have done that. Fifty per cent is far more than we

should offer. Possibly those people who come after us will reproach us for being so generous.

In the end public opinion is going to rule, and our concession is

made with the idea of securing public opinion on our side.

I am not a lawyer, but I believe that if the Congress of the United States says that Arizona is wrong, if the Executive Department of the United States says that Arizona is wrong, and if public opinion of the United States says that Arizona is wrong, that the Supreme Court of the United States will also say that Arizona is wrong. That is nothing against the integrity of the Supreme Court. It is nothing but a portion of our Government and our Government is going to finally register the will of the people, slowly and carefully perhaps, but in the end it ought to and will express public opinion. It is for that reason, and that reason alone, that we have been as generous as we have in our offer to California. We should not be requested to make a further sacrifice.

It is not a question of their gravity area as against ours, nor

how much they will give us of their water.

The question is how much stored water and power will Arizona give to California by allowing her to participate in the benefits of our storage facilities. For without them, under present law and conditions, California can not irrigate another acre.